

AD-A121 583

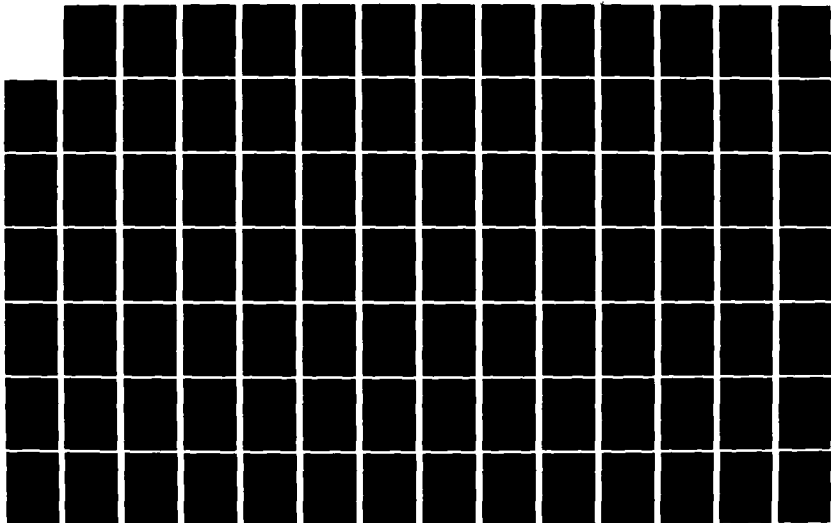
THE INFLUENCE OF CHANNEL REGULATING STRUCTURES ON FISH
AND WILDLIFE HABIT. (U) MISSOURI UNIV-ROLLA INST OF
RIVER STUDIES R H SMITH ET AL. AUG 82 DACW43-81-C-0061

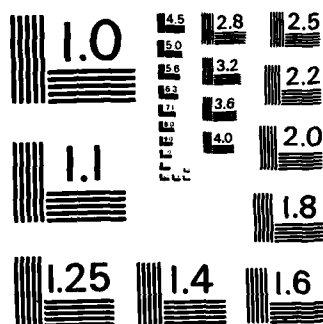
173

UNCLASSIFIED

F/G 13/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

①

AD A121583

THE INFLUENCE OF CHANNEL REGULATING STRUCTURES ON FISH AND WILDLIFE HABITAT

APPENDIX - VOLUME II TABLES

DTIC
ELECTE
S NOV 19 1982 D
A

AUGUST 1982

This document has been approved
for public release and sale; its
distribution is unlimited.

82 11 22 001

WILL WILL

REPORT DOCUMENTATION		REPORT COMPLETION FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. AD-A121583	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) The Influence of Channel Regulating Structures on Fish and Wildlife Habitat (GREAT-III) Appendix - Vol. II, Tables		5. TYPE OF REPORT & PERIOD COVERED Final
7. AUTHOR(s) Roger H. Smith; Glendon T. Stevens, Jr; Timothy B. Grace; A. Stephen Weithman		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS The Institute of River Studies, University of Missouri - Rolla Rolla, Missouri 65401		8. CONTRACT OR GRANT NUMBER(s) DACW 43-81-C-0061
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Engineer District, St. Louis, LMSPD-F 210 Tucker Boulevard, North St. Louis, Missouri 63101		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE August 1982
		13. NUMBER OF PAGES 220
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The purpose of this study was two-fold: 1. To evaluate aquatic habitat diversity, accretion patterns, flow patterns and bed material gradation existing around in-place channel regulating structures at different locations and of varying design; 2. To recommend, where possible, data needs and structure modifications which will maintain or improve existing fish and wildlife habitat while preserving the geometry needed to maintain an acceptable navigation channel.		

→ This report includes the following:

→ LIST OF TABLES :

Table	Page
1 Wetted (Area and Edge) Results ;	260
2 Suspended Sediment Results ;	261
3 Bed Sample Locations	262
4-11 Bed Sample Sieve Analyses;	264-271
12-166 Aggradation and/or Degradation Data	272-426
167-182 Bed and Water-Area and Volume Data	427-442
183 Physical Characteristics of Eight Study Dikes;	443
184 Common and Scientific Names of Fishes Collected;	444
185 Numbers and Relative Abundance of Fishes Collected;	446
186 Percentage Composition of Groups of Fishes Collected;	448
187 Percentage Composition of Groups of Fishes Collected at Three Unnotched and Five Notched Dikes;	449
188 Number of Species and Fish Collected and Margalef (d) Diversity Index Values ;	450
189 Capture Rates of Fish by Gear Type ;	451
190 Seasonal Capture Rates of Fish by Gear Type ;	452
191-201 Frequencies and Means of Total Lengths of Fishes Collected With All Sampling Gear;	453-463
202 Average Size of 11 Different Species of Fish Tr At Three Unnotched and Five Notched Dikes :	464
203 Taxonomic List of Benthic Invertebrates Collected With Artificial Substrate Samplers and a Grab (Dredge) Sampler;	465
204 Percentage Composition of Benthic Invertebrate Groups Collected ;	470
205 Percentage Composition of Benthic Invertebrate Groups Collected in Spring, Summer, and Fall	471
206 Total Number of Taxa and Invertebrates Collected and Margalef (d) Diversity Index Values	472

LIST OF TABLES
(continued)

Table		Page
207	Average Number of Taxa and Invertebrates Collected	473
208	Number of Taxa and Invertebrates Collected in Fall of 1981 in Grab (Dredge) Samples	474
209	Seasonal Capture Rates of Invertebrates	475
210	Water Quality Characteristics Associated with Eight Study Dikes	476
211	Animals and Animal Signs recorded in the Vicinity of the Eight Study Dikes	477

[illegible]

TABLE 1
WATER SURFACE AREA AND WETTED EDGE RESULTS

Study Area	Water Surface Area (acres)			Wetted Edge (ft.)		
	Year			Year		
	1965	1970	1980	1965	1970	1980
1	66	43	78	28,200	17,200	20,700
2	184	121	84	32,500	26,900	26,500
3	106	89	91	13,100	23,100	22,600
4	222	290	173	38,600	47,600	38,800
TOTAL	578	543	426	112,400	114,800	108,600

SUSPENDED SEDIMENT RESULTS

DIKE	DATE	<u>SAMPLER DEPTH</u> <u>BED DEPTH</u> (ft)	LOCATION	<u>SUSPENDED</u> <u>SOLIDS</u> (ppm)
98.9R	10-13-81	17/35	935 ft from Sta 1+00	48
98.9R	10-13-81	3/11	853 ft from Sta 3+00A	333
102.2L	9-16-81	18/35	581 ft from Sta 1+00	115
102.2L	9-16-81	5/11	607 ft from Sta 3+00	90
102.2L	10-15-81	15/39	574 ft from Sta 1+00	85
102.2L	10-15-81	4/6	623 ft from Sta 3+00	96
103.2L	9-16-81	14/28	459 ft from Sta 1+00	97
103.2L	9-16-81	10/20	591 ft from Sta 3+00	118
103.2L	10-15-81	10/21	367 ft from Sta 1+00	136
103.2L	10-15-81	3/7	476 ft from Sta 3+00	47
103.3R	10-16-81	5/10	738 ft from Sta 1+00	70
103.3R	10-16-81	4/7	630 ft from Sta 3+00A	87
113.5L	9-15-81	12/24	902 ft from Sta 1+00A	120
113.5L	9-15-81	3.5/7	853 ft from Sta 3+00A	81
113.5L	10-17-81	13/26	951 ft from Sta 1+00A	94
113.5L	10-17-81	3/7	869 ft from Sta 3+00A	82
113.9L	9-15-81	3.5/7	640 ft from Sta 1+00B	144
113.9L	9-15-81	1/3	679 ft from Sta 3+00A	131
113.9L	10-17-81	3/6	673 ft from Sta 1+00A	87
113.9L	10-17-81	1/3	682 ft from Sta 3+00A	77
114.0L	6-16-81	9/18	853 ft from Sta 1+00A'	179
114.0L	6-16-81	5/10	689 ft from Sta 3+00A'	84
114.0L	9-14-81	5/6	623 ft from Sta 1+00	116
114.0L	9-14-81	2.0/4.2	571 ft from Sta 3+00	114
114.0L	10-16-81	7/14	646 ft from Sta 1+00	76
114.0L	10-16-81	1/4	623 ft from Sta 3+00	52

TABLE 3
BED SAMPLE LOCATIONS

DIKE	DATE	SAMPLE NUMBER	LOCATION
98.9R	06-18-81	1	1033 ft from Sta 1+00
98.9R	06-18-81	2	328 ft from Sta 1+00
98.9R	06-18-81	3	295 ft from Sta 3+00A
98.9R	06-18-81	4	1017 ft from Sta 3+00A
98.9R	09-17-81	1	958 ft from Sta 1+00
98.9R	09-17-81	2	919 ft from Sta 3+00
98.9R	10-13-81	1	951 ft from Sta 1+00
98.9R	10-13-81	2	853 ft from Sta 3+00A'
100.1R	06-02-81	1	587 ft from Sta 1+00
100.1R	06-02-81	2	630 ft from Sta 3+00
100.1R	09-17-81	1	574 ft from Sta 1+00
100.1R	09-17-81	2	600 ft from Sta 3+00
100.1R	10-13-81	1	640 ft from Sta 1+00
100.1R	10-13-81	2	558 ft from Sta 3+00
102.2L	06-01-81	1	689 ft from Sta 3+00
102.2L	06-01-81	2	591 ft from Sta 1+00
102.2L	06-17-81	1	551 ft from Sta 1+00
102.2L	06-17-81	2	564 ft from Sta 3+00
102.2L	09-16-81	1	558 ft from Sta 1+00
102.2L	09-16-81	2	558 ft from Sta 3+00
102.2L	10-15-81	1	541 ft from Sta 1+00
102.2L	10-15-81	2	584 ft from Sta 3+00
103.2L	05-31-81	1	236 ft from Sta 9+00C
103.2L	05-31-81	2	230 ft from Sta 7+00C
103.2L	06-17-81	1	545 ft from Sta 3+00
103.2L	09-16-81	1	489 ft from Sta 1+00
103.2L	09-16-81	2	554 ft from Sta 3+00
103.2L	10-15-81	1	348 ft from Sta 1+00
103.2L	10-15-81	2	394 ft from Sta 3+00
103.3R	06-01-81	1	630 ft from Sta 1+00

BED SAMPLE LOCATIONS (continued)

DIKE	DATE	SAMPLE NUMBER	LOCATION
103.3R	06-01-81	2	387 ft from Sta 3+00A
103.3R	06-18-81	1	279 ft from Sta 1+00
103.3R	06-18-81	2	246 ft from Sta 3+00A
103.3R	09-18-81	1	571 ft from Sta 1+00
103.3R	09-18-81	2	535 ft from Sta 3+00
103.3R	10-16-81	1	735 ft from Sta 1+00
103.3R	10-16-81	2	591 ft from Sta 3+00A
113.5L	05-31-81	1	984 ft from Sta 1+00A
113.5L	05-31-81	2	968 ft from Sta 3+00A
113.5L	06-19-81	1	945 ft from Sta 1+00A
113.5L	06-19-81	2	935 ft from Sta 3+00A
113.5L	09-15-81	1	902 ft from Sta 1+00A
113.5L	09-15-81	2	902 ft from Sta 3+00A
113.5L	10-17-81	1	902 ft from Sta 1+00A
113.5L	10-17-81	2	869 ft from Sta 3+00A
113.9L	05-31-81	1	709 ft from Sta 3+00A
113.9L	05-31-81	2	630 ft from Sta 1+00A
113.9L	06-16-81	1	525 ft from Sta 1+00A
113.9L	06-16-81	2	558 ft from Sta 3+00A
113.9L	09-15-81	1	640 ft from Sta 1+00A
113.9L	09-15-81	2	623 ft from Sta 3+00A
113.9L	10-17-81	1	669 ft from Sta 1+00A
113.9L	10-17-81	2	673 ft from Sta 3+00A
114.0L	05-30-81	1	725 ft from Sta 1+00
114.0L	05-30-81	2	725 ft from Sta 3+00
114.0L	06-16-81	1	820 ft from Sta 1+00A'
114.0L	06-16-81	2	722 ft from Sta 3+00A'
114.0L	09-14-81	1	718 ft from Sta 1+00
114.0L	09-14-81	2	863 ft from Sta 3+00
114.0L	10-16-81	1	673 ft from Sta 1+00
114.0L	10-16-81	2	541 ft from Sta 3+00

TABLE 4
BED SAMPLE
SIEVE ANALYSIS
DIKE 114.0 L

DATE	5-30-81		6-16-81		9-14-81		10-16-81	
SAMPLE	1	2	1	2	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"								
1"								
3/4"								
1/2"								
3/8"		100.0					100.0	
# 4		99.9			100.0		99.8	
#10	100.0	99.2		100.0	99.7	100.0	97.5	
#20	99.9	95.9	100.0	99.9	98.2	99.9	75.7	100.0
#40	98.4	84.5	99.3	97.8	79.9	97.5	56.8	99.7
#60	97.9	66.7	98.2	92.6	47.0	93.3	53.4	98.5
#100	33.5	13.9	93.5	27.4	20.2	74.4	48.8	91.6
#200	7.9	4.1	87.5	10.9	14.4	54.4	46.9	85.4
D65	.21mm	.25mm		.18mm	.36mm	.14mm	.60mm	
D50	.19mm	.22mm		.17mm	.29mm		.22mm	
	PERCENT CLAY							
	5.36		21.36		6.48	10.10	13.19	15.02
	TOTAL WEIGHT OF SAMPLE (g.)							
	406.38	362.8	108.09	351.9	398.40	293.90	324.75	102.80

TABLE 5

**BED SAMPLE
SIEVE ANALYSIS
DIKE 113.9 L**

DATE	5-31-81		6-16-81		9-15-81		10-17-81	
SAMPLE	1	2	1	2	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"								
1"		100.0						100.0
3/4"		89.1						89.8
1/2"		85.2						84.7
3/8"		81.7						80.4
# 4		73.4	100.0		100.0	100.0		73.9
#10	100.0	66.3	99.9	100.0	99.8	99.9	100.0	67.7
#20	99.8	63.0	99.0	99.7	98.0	99.8	99.8	66.4
#40	98.1	57.6	90.6	99.5	84.4	99.3	97.9	65.4
#60	89.4	50.3	67.8	98.0	32.1	91.3	90.9	61.4
#100	13.9	18.7	6.0	17.4	13.0	10.3	64.8	7.1
#200	3.3	6.9	1.6	2.4	10.6	2.2	57.2	1.0
D65	.23mm	1.7mm	.25mm	.20mm	.32mm	.24mm	.16mm	.42mm
D50	.23mm	.23mm	.22mm	.19mm	.28mm	.23mm		.21mm
	PERCENT CLAY							
					4.79		17.53	
	TOTAL WEIGHT OF SAMPLE (g.)							
	322.0	392.9	417.2	343.0	257.12	223.8	239.85	400.9

TABLE 6
BED SAMPLE
SIEVE ANALYSIS
DIKE I13.5 L

DATE	5-31-81		6-19-81		9-15-81		10-17-81	
SAMPLE	1	2	1	2	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"								
1"								
3/4"				100.0		100.0		
1/2"				98.6	100.0	81.4	100.0	
3/8"	100.0	100.0		95.0	99.5	73.1	99.4	
# 4	99.4	99.3		87.8	96.0	62.7	98.2	
#10	86.3	93.6	100.0	71.4	70.8	48.7	95.7	
#20	40.0	71.0	95.8	49.8	46.3	35.0	80.5	100.0
#40	7.0	24.1	56.3	29.0	13.0	23.9	39.4	99.7
#60	2.5	11.7	32.5	18.2	5.5	16.5	31.0	93.0
#100	0.7	7.1	14.1	8.7	2.0	8.7	28.5	54.7
#200	0.3	5.8	6.9	5.7	1.4	3.2	27.7	44.4
D65	1.1mm	.74mm	.45mm	1.7mm	1.7mm	5.8mm	.81mm	.18mm
D50	.85mm	.64mm	.29mm	.88mm	.86mm	2.1mm	.68mm	.13mm
	PERCENT CLAY							
							10.74	21.15
	TOTAL WEIGHT OF SAMPLE (g.)							
	162.7	348.2	381.1	367.8	429.3	293.3	338.47	274.04

TABLE 7
BED SAMPLE
SIEVE ANALYSIS
DIKE 103.3 R

DATE	6-1-81		6-18-81		9-18-81		10-16-81	
SAMPLE	1	2	1	2	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"								
1"								
3/4"								
1/2"								
3/8"								
# 4								
#10								
#20								
#40								
#60								
#100								
#200	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
D65								
D50								
PERCENT CLAY								
	33.63	29.00	29.80	17.60	18.55	24.14	12.23	14.78
TOTAL WEIGHT OF SAMPLE (g.)								
	58.92	59.85	61.54	62.15	49.15	53.27	51.86	56.55

TABLE 8

**BED SAMPLE
SIEVE ANALYSIS
DIKE 103.2 L**

DATE	5-31-81		6-17-81		9-16-81		10-15-81	
SAMPLE	1	2	1	2	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"								
1"								
3/4"								
1/2"								
3/8"								
# 4						100.0		
#10	100.0					99.8		
#20	99.9	100.0				98.1		
#40	99.8	99.9				93.0		
#60	99.0	99.7				69.2		
#100	84.5	94.9				21.4		
#200	65.7	82.2	100.0		100.0	13.3	100.0	100.0
D65						.27mm		
D50						.25mm		
	PERCENT CLAY							
	6.80	17.70	15.95		17.40	5.38	19.52	25.00
	TOTAL WEIGHT OF SAMPLE (g.)							
	249.26	234.47	57.23		78.13	184.56	59.59	54.89

TABLE 9
BED SAMPLE
SIEVE ANALYSIS
DIKE 102.2 L

DATE	6-1-81		6-17-81		9-16-81		10-15-81	
SAMPLE	1	2	1	2	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"				100.0			100.0	
1"				57.0	100.0		86.5	
3/4"			100.0	57.0	89.2	100.0	78.2	100.0
1/2"	100.0		99.6	33.9	79.9	94.4	66.9	94.3
3/8"	99.0		99.6	25.4	67.7	91.8	62.0	91.3
# 4	97.2	100.0	96.0	15.5	48.7	84.0	51.5	85.2
# 10	88.5	99.5	80.0	8.1	33.5	75.7	44.6	77.6
# 20	61.5	92.4	46.1	3.4	17.4	55.8	37.8	52.4
# 40	31.4	74.1	13.7	1.3	7.4	21.9	32.5	24.5
# 60	8.7	52.0	4.9	.7	3.5	6.1	30.1	17.8
# 100	5.0	26.5	1.7	.3	1.8	2.2	28.8	14.2
# 200	1.1	15.2	0.9	.2	.6	1.0	28.3	12.0
D65	.89mm	.35mm	1.2mm	.31mm	8.8mm	1.2mm	13.0mm	1.2mm
D50	.70mm	.25mm	.88mm	.18mm	5.0mm	.69mm	5.2mm	.80mm
	PERCENT CLAY							
							24.50	4.80
	TOTAL WEIGHT OF SAMPLE (g.)							
	320.8	361.8	494.1	227.4	241.8	248.7	320.50	449.00

TABLE 10
BED SAMPLE
SIEVE ANALYSIS
DIKE 100.IR

DATE	6-2-81		6-17-81		9-17-81		10-13-81	
SAMPLE	1	2	1	2	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"								
1"								
3/4"								
1/2"								
3/8"								100.0
# 4								99.6
#10								99.5
#20								99.0
#40		100.0						93.3
#60		99.8						89.0
#100		97.9						85.7
#200	100.0	94.9			100.0	100.0	100.0	83.3
D65								
D50								
	PERCENT CLAY							
	28.50	12.20			30.38	22.00	20.00	21.31
	TOTAL WEIGHT OF SAMPLE (g.)							
	60.90	124.07			48.97	55.95	54.06	244.74

TABLE 11
BED SAMPLE
SIEVE ANALYSIS
DIKE 98.9R

DATE	6-18-81				9-17-81		10-13-81	
SAMPLE	1	2	3	4	1	2	1	2
SIEVE	PERCENT FINER							
1 1/2"	100.0							
1"	91.3					100.0		100.0
3/4"	91.3					84.2		97.3
1/2"	91.3					76.9		89.5
3/8"	91.3			100.0		67.3	100.0	86.4
# 4	90.6			99.9		56.7	99.9	82.3
#10	89.7			97.0		48.0	99.9	75.7
#20	82.4			67.8		41.2	99.9	57.0
#40	54.4			17.2		24.6	99.8	18.9
#60	25.8			3.7		12.0	99.6	4.9
#100	3.1			.7		9.4	99.4	3.4
#200	.8	100.0	100.0	.5	100.0	8.5	98.8	3.1
D65	.50mm			.82mm		8.5mm		1.2mm
D50	.41mm			.68mm		2.7mm		.70mm
	PERCENT CLAY							
		28.40	23.10		27.92	4.54	27.31	
	TOTAL WEIGHT OF SAMPLE (g.)							
	314.6	60.12	61.01	417.8	5.62	287.83	195.65	457.6

TABLE 12
AGGRADATION AND/OR DEGRADATION

DATE=5-30-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=1+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,800	3,800	350	350
50- 100	3,625	7,425	525	875
100- 150	3,275	10,700	875	1,750
150- 200	2,762	13,462	1,387	3,137
200- 250	2,312	15,775	1,837	4,975
250- 300	2,112	17,887	2,037	7,012
300- 350	2,037	19,925	2,112	9,125
350- 400	1,925	21,850	2,225	11,350
400- 450	1,925	23,775	2,225	13,575
450- 500	1,987	25,762	2,162	15,737
500- 550	2,137	27,900	2,012	17,750
550- 600	2,375	30,275	1,775	19,525
600- 650	2,550	32,825	1,600	21,125
650- 700	2,512	35,337	1,637	22,762
700- 750	2,262	37,600	1,887	24,650
750- 800	1,987	39,587	2,162	26,812
800- 850	1,775	41,362	2,375	29,187
850- 900	1,637	43,000	2,512	31,700
900- 950	1,625	44,625	2,525	34,225
950-1000	1,762	46,387	2,387	36,612

TABLE 13
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=1+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,800	3,800	350	350
50- 100	3,625	7,425	525	875
100- 150	3,150	10,575	1,000	1,875
150- 200	2,475	13,050	1,675	3,550
200- 250	2,188	15,237	1,962	5,512
250- 300	2,137	17,375	2,012	7,525
300- 350	2,075	19,450	2,075	9,600
350- 400	2,075	21,525	2,075	11,675
400- 450	2,075	23,600	2,075	13,750
450- 500	2,150	25,750	2,000	15,750
500- 550	2,262	28,012	1,887	17,637
550- 600	2,425	30,437	1,725	19,362
600- 650	2,587	33,025	1,563	20,925
650- 700	2,450	35,475	1,700	22,625
700- 750	2,162	37,637	1,987	24,612
750- 800	1,975	39,612	2,175	26,787
800- 850	1,887	41,500	2,262	29,050
850- 900	1,812	43,312	2,337	31,387
900- 950	1,887	45,200	2,262	33,650
950-1000	1,900	47,100	2,250	35,900

TABLE 14
AGGRADATION AND/OR DEGRADATION

DATE=9-14-81

DIKE NUMBER=114.0L

BOTTOM DATUM = 300

RANGE NUMBER=1+00A'

TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,800	3,800	350	350
50- 100	3,625	7,425	525	875
100- 150	3,250	10,675	900	1,775
150- 200	2,587	13,262	1,563	3,337
200- 250	2,250	15,512	1,900	5,237
250- 300	2,212	17,725	1,937	7,175
300- 350	2,125	19,850	2,025	9,200
350- 400	2,125	21,975	2,025	11,225
400- 450	2,125	24,100	2,025	13,250
450- 500	2,212	26,312	1,937	15,187
500- 550	2,287	28,600	1,862	17,050
550- 600	2,425	31,025	1,725	18,775
600- 650	2,575	33,600	1,575	20,350
650- 700	2,400	36,000	1,750	22,100
700- 750	2,150	38,150	2,000	24,100
750- 800	1,937	40,087	2,212	26,312
800- 850	1,812	41,900	2,337	28,650
850- 900	1,812	43,712	2,337	30,987
900- 950	1,925	45,637	2,225	33,212
950-1000	1,937	47,575	2,212	35,425

TABLE 15
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=1+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,625	3,625	525	525
50- 100	3,562	7,188	587	1,112
100- 150	3,187	10,375	962	2,075
150- 200	2,512	12,887	1,637	3,712
200- 250	2,162	15,050	1,987	5,700
250- 300	2,137	17,188	2,012	7,712
300- 350	2,062	19,250	2,087	9,800
350- 400	1,987	21,237	2,162	11,962
400- 450	2,012	23,250	2,137	14,100
450- 500	2,050	25,300	2,100	16,200
500- 550	2,150	27,450	2,000	18,200
550- 600	2,212	29,662	1,937	20,137
600- 650	2,350	32,012	1,800	21,937
650- 700	2,450	34,462	1,700	23,637
700- 750	2,225	36,687	1,925	25,562
750- 800	1,900	38,587	2,250	27,812
800- 850	1,725	40,312	2,425	30,237
850- 900	1,737	42,050	2,412	32,650
900- 950	1,737	43,787	2,412	35,062
950-1000	1,837	45,625	2,312	37,375

TABLE 16
AGGRADATION AND/OR DEGRADATION

DATE=5-30-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=3+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,725	3,725	425	425
50- 100	3,325	7,050	825	1,250
100- 150	3,000	10,050	1,150	2,400
150- 200	2,775	12,825	1,375	3,775
200- 250	2,600	15,425	1,550	5,325
250- 300	2,300	17,725	1,850	7,175
300- 350	2,087	19,812	2,062	9,237
350- 400	2,087	21,900	2,062	11,300
400- 450	2,250	24,150	1,900	13,200
450- 500	2,437	26,587	1,712	14,912
500- 550	2,487	29,075	1,662	16,575
550- 600	2,500	31,575	1,650	18,225
600- 650	2,487	34,062	1,662	19,887
650- 700	2,450	36,512	1,700	21,587
700- 750	2,425	38,937	1,725	23,312
750- 800	2,437	41,375	1,712	25,025
800- 850	2,400	43,775	1,750	26,775
850- 900	2,312	46,087	1,837	28,612

TABLE 17
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=3+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,725	3,725	425	425
50- 100	3,187	6,912	962	1,387
100- 150	2,775	9,688	1,375	2,762
150- 200	2,587	12,275	1,563	4,325
200- 250	2,387	14,662	1,762	6,087
250- 300	2,262	16,925	1,887	7,975
300- 350	2,275	19,200	1,875	9,850
350- 400	2,350	21,550	1,800	11,650
400- 450	2,450	24,000	1,700	13,350
450- 500	2,537	26,537	1,612	14,962
500- 550	2,587	29,125	1,563	16,525
550- 600	2,587	31,712	1,563	18,087
600- 650	2,537	34,250	1,612	19,700
650- 700	2,500	36,750	1,650	21,350
700- 750	2,525	39,275	1,625	22,975
750- 800	2,525	41,800	1,625	24,600
800- 850	2,437	44,237	1,712	26,312
850- 900	2,337	46,575	1,812	28,125

TABLE 18
AGGRADATION AND/OR DEGRADATION

DATE=9-14-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=3+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	400	400
50- 100	3,362	7,112	787	1,187
100- 150	3,037	10,150	1,112	2,300
150- 200	2,813	12,962	1,337	3,637
200- 250	2,562	15,525	1,587	5,225
250- 300	2,287	17,812	1,862	7,087
300- 350	2,162	19,975	1,987	9,075
350- 400	2,175	22,150	1,975	11,050
400- 450	2,275	24,425	1,875	12,925
450- 500	2,412	26,837	1,737	14,662
500- 550	2,487	29,325	1,662	16,325
550- 600	2,450	31,775	1,700	18,025
600- 650	2,437	34,212	1,712	19,737
650- 700	2,462	36,675	1,687	21,425
700- 750	2,425	39,100	1,725	23,150
750- 800	2,437	41,537	1,712	24,862
800- 850	2,425	43,962	1,725	26,587
850- 900	2,362	46,325	1,787	28,375

TABLE 19
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=3+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,650	3,650	500	500
50- 100	3,237	6,887	912	1,412
100- 150	2,837	9,725	1,312	2,725
150- 200	2,612	12,337	1,537	4,262
200- 250	2,362	14,700	1,787	6,050
250- 300	2,175	16,875	1,975	8,025
300- 350	2,162	19,037	1,987	10,012
350- 400	2,250	21,287	1,900	11,912
400- 450	2,375	23,662	1,775	13,687
450- 500	2,425	26,087	1,725	15,412
500- 550	2,462	28,550	1,687	17,100
550- 600	2,450	31,000	1,700	18,800
600- 650	2,400	33,400	1,750	20,550
650- 700	2,387	35,787	1,762	22,312
700- 750	2,375	38,162	1,775	24,087
750- 800	2,387	40,550	1,762	25,850
800- 850	2,362	42,912	1,787	27,637
850- 900	2,300	45,212	1,850	29,487

TABLE 20
AGGRADATION AND/OR DEGRADATION

DATE=5-30-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=5+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	400	400
50- 100	3,325	7,075	825	1,225
100- 150	3,075	10,150	1,075	2,300
150- 200	2,950	13,100	1,200	3,500
200- 250	2,900	16,000	1,250	4,750
250- 300	2,850	18,850	1,300	6,050
300- 350	2,775	21,625	1,375	7,425
350- 400	2,725	24,350	1,425	8,850
400- 450	2,675	27,025	1,475	10,325
450- 500	2,625	29,650	1,525	11,850
500- 550	2,550	32,200	1,600	13,450
550- 600	2,475	34,675	1,675	15,125
600- 650	2,487	37,162	1,662	16,787
650- 700	2,537	39,700	1,612	18,400
700- 750	2,575	42,275	1,575	19,975
750- 800	2,575	44,850	1,575	21,550
800- 850	2,550	47,400	1,600	23,150
850- 900	2,550	49,950	1,600	24,750

TABLE 21
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER='14.0L
BOTTOM DATUM = 300

RANGE NUMBER=5+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	400	400
50- 100	3,312	7,062	837	1,237
100- 150	2,987	10,050	1,162	2,400
150- 200	2,837	12,887	1,312	3,712
200- 250	2,800	15,687	1,350	5,062
250- 300	2,737	18,425	1,412	6,475
300- 350	2,687	21,112	1,462	7,937
350- 400	2,625	23,737	1,525	9,462
400- 450	2,562	26,300	1,587	11,050
450- 500	2,575	28,875	1,575	12,625
500- 550	2,625	31,500	1,525	14,150
550- 600	2,650	34,150	1,500	15,650
600- 650	2,650	36,800	1,500	17,150
650- 700	2,650	39,450	1,500	18,650
700- 750	2,625	42,075	1,525	20,175
750- 800	2,500	44,575	1,650	21,825
800- 850	2,325	46,900	1,825	23,650
850- 900	2,188	49,087	1,962	25,612

TABLE 22
AGGRADATION AND/OR DEGRADATION

DATE=9-14-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=5+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,775	3,775	375	375
50- 100	3,350	7,125	800	1,175
100- 150	3,012	10,137	1,137	2,312
150- 200	2,862	13,000	1,287	3,600
200- 250	2,825	15,825	1,325	4,925
250- 300	2,762	18,587	1,387	6,312
300- 350	2,700	21,287	1,450	7,762
350- 400	2,612	23,900	1,537	9,300
400- 450	2,550	26,450	1,600	10,900
450- 500	2,562	29,012	1,587	12,487
500- 550	2,600	31,612	1,550	14,037
550- 600	2,637	34,250	1,512	15,550
600- 650	2,650	36,900	1,500	17,050
650- 700	2,625	39,525	1,525	18,575
700- 750	2,550	42,075	1,600	20,175
750- 800	2,412	44,487	1,737	21,912
800- 850	2,237	46,725	1,912	23,825
850- 900	2,075	48,800	2,075	25,900

TABLE 23
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=5+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	400	400
50- 100	3,325	7,075	825	1,225
100- 150	3,025	10,100	1,125	2,350
150- 200	2,875	12,975	1,275	3,625
200- 250	2,825	15,800	1,325	4,950
250- 300	2,775	18,575	1,375	6,325
300- 350	2,712	21,287	1,437	7,762
350- 400	2,637	23,925	1,512	9,275
400- 450	2,575	26,500	1,575	10,850
450- 500	2,550	29,050	1,600	12,450
500- 550	2,575	31,625	1,575	14,025
550- 600	2,612	34,237	1,537	15,562
600- 650	2,625	36,862	1,525	17,087
650- 700	2,625	39,487	1,525	18,612
700- 750	2,587	42,075	1,563	20,175
750- 800	2,412	44,487	1,737	21,912
800- 850	2,262	46,750	1,887	23,800
850- 900	2,162	48,912	1,987	25,787

TABLE 24
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=7+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,725	3,725	425	425
50- 100	3,237	6,962	912	1,337
100- 150	2,925	9,887	1,225	2,562
150- 200	2,787	12,675	1,362	3,925
200- 250	2,775	15,450	1,375	5,300
250- 300	2,813	18,262	1,337	6,637
300- 350	2,825	21,087	1,325	7,962
350- 400	2,787	23,875	1,362	9,325
400- 450	2,725	26,600	1,425	10,750
450- 500	2,687	29,287	1,462	12,212
500- 550	2,687	31,975	1,462	13,675
550- 600	2,712	34,687	1,437	15,112
600- 650	2,712	37,400	1,437	16,550
650- 700	2,687	40,087	1,462	18,012
700- 750	2,600	42,687	1,550	19,562
750- 800	2,437	45,125	1,712	21,275
800- 850	2,250	47,375	1,900	23,175
850- 900	2,087	49,462	2,062	25,237

TABLE 25
AGGRADATION AND/OR DEGRADATION

DATE=9-14-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=7+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,700	3,700	450	450
50- 100	3,200	6,900	950	1,400
100- 150	2,900	9,800	1,250	2,650
150- 200	2,775	12,575	1,375	4,025
200- 250	2,775	15,350	1,375	5,400
250- 300	2,825	18,175	1,325	6,725
300- 350	2,850	21,025	1,300	8,025
350- 400	2,837	23,862	1,312	9,337
400- 450	2,813	26,675	1,337	10,675
450- 500	2,775	29,450	1,375	12,050
500- 550	2,737	32,187	1,412	13,462
550- 600	2,712	34,900	1,437	14,900
600- 650	2,700	37,600	1,450	16,350
650- 700	2,687	40,287	1,462	17,812
700- 750	2,587	42,875	1,563	19,375
750- 800	2,400	45,275	1,750	21,125
800- 850	2,275	47,550	1,875	23,000
850- 900	2,250	49,800	1,900	24,900

TABLE 26
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=7+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,675	3,675	475	475
50- 100	3,150	6,825	1,000	1,475
100- 150	2,850	9,675	1,300	2,775
150- 200	2,737	12,412	1,412	4,187
200- 250	2,750	15,162	1,400	5,587
250- 300	2,787	17,950	1,362	6,950
300- 350	2,800	20,750	1,350	8,300
350- 400	2,787	23,537	1,362	9,662
400- 450	2,762	26,300	1,387	11,050
450- 500	2,737	29,037	1,412	12,462
500- 550	2,712	31,750	1,437	13,900
550- 600	2,687	34,437	1,462	15,362
600- 650	2,687	37,125	1,462	16,825
650- 700	2,675	39,800	1,475	18,300
700- 750	2,537	42,337	1,612	19,912
750- 800	2,337	44,675	1,812	21,725
800- 850	2,225	46,900	1,925	23,650
850- 900	2,137	49,037	2,012	25,662

TABLE 27
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=9+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,775	3,775	375	375
50- 100	3,175	6,950	975	1,350
100- 150	2,900	9,850	1,250	2,600
150- 200	2,837	12,687	1,312	3,912
200- 250	2,813	15,500	1,337	5,250
250- 300	2,800	18,300	1,350	6,600
300- 350	2,800	21,100	1,350	7,950
350- 400	2,825	23,925	1,325	9,275
400- 450	2,850	26,775	1,300	10,575
450- 500	2,862	29,637	1,287	11,862
500- 550	2,862	32,500	1,287	13,150
550- 600	2,825	35,325	1,325	14,475
600- 650	2,750	38,075	1,400	15,875
650- 700	2,637	40,712	1,512	17,387
700- 750	2,500	43,212	1,650	19,037
750- 800	2,312	45,525	1,837	20,875
800- 850	2,125	47,650	2,025	22,900
850- 900	2,075	49,725	2,075	24,975

TABLE 28
AGGRADATION AND/OR DEGRADATION

DATE=9-14-81

DIKE NUMBER=114.0L

BOTTOM DATUM = 300

RANGE NUMBER=9+00A'

TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,775	3,775	375	375
50- 100	3,175	6,950	975	1,350
100- 150	2,900	9,850	1,250	2,600
150- 200	2,837	12,687	1,312	3,912
200- 250	2,813	15,500	1,337	5,250
250- 300	2,800	18,300	1,350	6,600
300- 350	2,825	21,125	1,325	7,925
350- 400	2,862	23,987	1,287	9,212
400- 450	2,887	26,875	1,262	10,475
450- 500	2,912	29,787	1,237	11,712
500- 550	2,937	32,725	1,212	12,925
550- 600	2,925	35,650	1,225	14,150
600- 650	2,787	38,437	1,362	15,512
650- 700	2,650	41,087	1,500	17,012
700- 750	2,537	43,625	1,612	18,625
750- 800	2,312	45,937	1,837	20,462
800- 850	2,162	48,100	1,987	22,450
850- 900	2,137	50,237	2,012	24,462

TABLE 29
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=114.0L
BOTTOM DATUM = 300

RANGE NUMBER=9+00A'
TOP DATUM = 383

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,700	3,700	450	450
50- 100	3,150	6,850	1,000	1,450
100- 150	2,887	9,737	1,262	2,712
150- 200	2,787	12,525	1,362	4,075
200- 250	2,250	14,775	1,900	5,975
250- 300	2,250	17,025	1,900	7,875
300- 350	2,762	19,787	1,387	9,262
350- 400	2,787	22,575	1,362	10,625
400- 450	2,800	25,375	1,350	11,975
450- 500	2,787	28,162	1,362	13,337
500- 550	2,762	30,925	1,387	14,725
550- 600	2,700	33,625	1,450	16,175
600- 650	2,600	36,225	1,550	17,725
650- 700	2,500	38,725	1,650	19,375
700- 750	2,350	41,075	1,800	21,175
750- 800	2,225	43,300	1,925	23,100
800- 850	2,200	45,500	1,950	25,050
850- 900	2,175	47,675	1,975	27,025

TABLE 30
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=1+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,175	3,175	325	325
50- 100	2,725	5,900	775	1,100
100- 150	2,525	8,425	975	2,075
150- 200	2,475	10,900	1,025	3,100
200- 250	2,375	13,275	1,125	4,225
250- 300	2,200	15,475	1,300	5,525
300- 350	2,062	17,537	1,437	6,962
350- 400	2,012	19,550	1,487	8,450
400- 450	2,050	21,600	1,450	9,900
450- 500	2,062	23,662	1,437	11,337
500- 550	2,012	25,675	1,487	12,825
550- 600	1,875	27,550	1,625	14,450
600- 650	1,800	29,350	1,700	16,150
650- 700	1,925	31,275	1,575	17,725
700- 750	2,212	33,487	1,287	19,012
750- 800	2,050	35,537	1,450	20,462
800- 850	1,512	37,050	1,987	22,450
850- 900	1,325	38,375	2,175	24,625
900- 950	1,300	39,675	2,200	26,825
950-1000	1,362	41,037	2,137	28,962
1000-1050	962	42,000	2,537	31,500

TABLE 31
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=1+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,200	3,200	300	300
50- 100	2,775	5,975	725	1,025
100- 150	2,562	8,537	938	1,962
150- 200	2,475	11,012	1,025	2,987
200- 250	2,275	13,287	1,225	4,212
250- 300	2,062	15,350	1,437	5,650
300- 350	2,000	17,350	1,500	7,150
350- 400	2,000	19,350	1,500	8,650
400- 450	2,050	21,400	1,450	10,100
450- 500	2,050	23,450	1,450	11,550
500- 550	1,950	25,400	1,550	13,100
550- 600	1,825	27,225	1,675	14,775
600- 650	1,775	29,000	1,725	16,500
650- 700	1,925	30,925	1,575	18,075
700- 750	2,025	32,950	1,475	19,550
750- 800	1,875	34,825	1,625	21,175
800- 850	1,550	36,375	1,950	23,125
850- 900	1,300	37,675	2,200	25,325
900- 950	1,275	38,950	2,225	27,550
950-1000	1,312	40,262	2,188	29,737
1000-1050	862	41,125	2,637	32,375

TABLE 32
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=1+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,225	3,225	275	275
50- 100	2,800	6,025	700	975
100- 150	2,550	8,575	950	1,925
150- 200	2,450	11,025	1,050	2,975
200- 250	2,312	13,337	1,187	4,162
250- 300	2,137	15,475	1,362	5,525
300- 350	2,050	17,525	1,450	6,975
350- 400	2,062	19,587	1,437	8,412
400- 450	2,087	21,675	1,412	9,825
450- 500	2,137	23,812	1,362	11,187
500- 550	1,962	25,775	1,537	12,725
550- 600	1,825	27,600	1,675	14,400
600- 650	1,925	29,525	1,575	15,975
650- 700	1,900	31,425	1,600	17,575
700- 750	1,775	33,200	1,725	19,300
750- 800	1,600	34,800	1,900	21,200
800- 850	1,425	36,225	2,075	23,275
850- 900	1,312	37,537	2,188	25,462
900- 950	1,262	38,800	2,237	27,700
950-1000	1,175	39,975	2,325	30,025
1000-1050	725	40,700	2,775	32,800

TABLE 33
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=1+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,112	3,112	387	387
50- 100	2,637	5,750	862	1,250
100- 150	2,387	8,137	1,112	2,362
150- 200	2,275	10,412	1,225	3,587
200- 250	2,125	12,537	1,375	4,962
250- 300	1,987	14,525	1,512	6,475
300- 350	1,950	16,475	1,550	8,025
350- 400	1,950	18,425	1,550	9,575
400- 450	1,950	20,375	1,550	11,125
450- 500	2,000	22,375	1,500	12,625
500- 550	1,962	24,337	1,537	14,162
550- 600	1,725	26,062	1,775	15,937
600- 650	1,687	27,750	1,812	17,750
650- 700	1,787	29,537	1,712	19,462
700- 750	1,737	31,275	1,762	21,225
750- 800	1,587	32,862	1,912	23,137
800- 850	1,350	34,212	2,150	25,287
850- 900	1,200	35,412	2,300	27,587
900- 950	1,187	36,600	2,312	29,900
950-1000	1,150	37,750	2,350	32,250
1000-1050	962	38,712	2,537	34,787

TABLE 34
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=3+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,225	3,225	275	275
50- 100	2,825	6,050	675	950
100- 150	2,562	8,612	938	1,887
150- 200	2,437	11,050	1,062	2,950
200- 250	2,375	13,425	1,125	4,075
250- 300	2,312	15,737	1,187	5,262
300- 350	2,237	17,975	1,262	6,525
350- 400	2,175	20,150	1,325	7,850
400- 450	2,150	22,300	1,350	9,200
450- 500	2,125	24,425	1,375	10,575
500- 550	2,050	26,475	1,450	12,025
550- 600	1,987	28,462	1,512	13,537
600- 650	1,962	30,425	1,537	15,075
650- 700	2,025	32,450	1,475	16,550
700- 750	2,112	34,562	1,387	17,937
750- 800	2,162	36,725	1,337	19,275
800- 850	2,200	38,925	1,300	20,575
850- 900	2,125	41,050	1,375	21,950
900- 950	1,975	43,025	1,525	23,475
950-1000	1,825	44,850	1,675	25,150
1000-1050	1,750	46,600	1,750	26,900

TABLE 35
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=3+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,200	3,200	300	300
50- 100	2,800	6,000	700	1,000
100- 150	2,550	8,550	950	1,950
150- 200	2,425	10,975	1,075	3,025
200- 250	2,337	13,312	1,162	4,187
250- 300	2,237	15,550	1,262	5,450
300- 350	2,200	17,750	1,300	6,750
350- 400	2,188	19,937	1,312	8,062
400- 450	2,112	22,050	1,387	9,450
450- 500	2,025	24,075	1,475	10,925
500- 550	1,987	26,062	1,512	12,437
550- 600	1,962	28,025	1,537	13,975
600- 650	2,037	30,062	1,462	15,437
650- 700	2,150	32,212	1,350	16,787
700- 750	2,212	34,425	1,287	18,075
750- 800	2,250	36,675	1,250	19,325
800- 850	2,225	38,900	1,275	20,600
850- 900	2,112	41,012	1,387	21,987
900- 950	1,887	42,900	1,612	23,600
950-1000	1,775	44,675	1,725	25,325
1000-1050	1,837	46,512	1,662	26,987

TABLE 36
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=3+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,175	3,175	325	325
50- 100	2,762	5,938	737	1,062
100- 150	2,550	8,487	950	2,012
150- 200	2,450	10,938	1,050	3,062
200- 250	2,362	13,300	1,137	4,200
250- 300	2,237	15,537	1,262	5,462
300- 350	2,162	17,700	1,337	6,800
350- 400	2,150	19,850	1,350	8,150
400- 450	2,087	21,937	1,412	9,562
450- 500	2,000	23,937	1,500	11,062
500- 550	1,987	25,925	1,512	12,575
550- 600	2,025	27,950	1,475	14,050
600- 650	2,112	30,062	1,387	15,437
650- 700	2,175	32,237	1,325	16,762
700- 750	2,188	34,425	1,312	18,075
750- 800	2,212	36,637	1,287	19,362
800- 850	2,125	38,762	1,375	20,737
850- 900	1,962	40,725	1,537	22,275
900- 950	1,862	42,587	1,637	23,912
950-1000	1,800	44,387	1,700	25,612
1000-1050	1,525	45,912	1,975	27,587

TABLE 37
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=3+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,187	3,187	313	313
50- 100	2,787	5,975	712	1,025
100- 150	2,550	8,525	950	1,975
150- 200	2,412	10,938	1,087	3,062
200- 250	2,337	13,275	1,162	4,225
250- 300	2,250	15,525	1,250	5,475
300- 350	2,175	17,700	1,325	6,800
350- 400	2,137	19,837	1,362	8,162
400- 450	2,050	21,887	1,450	9,612
450- 500	1,937	23,825	1,563	11,175
500- 550	1,887	25,712	1,612	12,787
550- 600	1,912	27,625	1,587	14,375
600- 650	1,975	29,600	1,525	15,900
650- 700	2,025	31,625	1,475	17,375
700- 750	2,050	33,675	1,450	18,825
750- 800	2,050	35,725	1,450	20,275
800- 850	2,000	37,725	1,500	21,775
850- 900	1,850	39,575	1,650	23,425
900- 950	1,700	41,275	1,800	25,225
950-1000	1,625	42,900	1,875	27,100
1000-1050	1,537	44,437	1,962	29,062

TABLE 38
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=5+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,150	3,150	350	350
50- 100	2,725	5,875	775	1,125
100- 150	2,575	8,450	925	2,050
150- 200	2,475	10,925	1,025	3,075
200- 250	2,350	13,275	1,150	4,225
250- 300	2,275	15,550	1,225	5,450
300- 350	2,250	17,800	1,250	6,700
350- 400	2,175	19,975	1,325	8,025
400- 450	2,100	22,075	1,400	9,425
450- 500	2,087	24,162	1,412	10,837
500- 550	2,062	26,225	1,437	12,275
550- 600	2,087	28,312	1,412	13,687
600- 650	2,162	30,475	1,337	15,025
650- 700	2,225	32,700	1,275	16,300
700- 750	2,300	35,000	1,200	17,500
750- 800	2,387	37,387	1,112	18,612
800- 850	2,425	39,812	1,075	19,687
850- 900	2,325	42,137	1,175	20,862
900- 950	2,075	44,212	1,425	22,287
950-1000	1,812	46,025	1,687	23,975
1000-1050	1,650	47,675	1,850	25,825
1050-1100	1,563	49,237	1,937	27,762

TABLE 39
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=5+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,100	3,100	400	400
50- 100	2,650	5,750	850	1,250
100- 150	2,487	8,237	1,012	2,262
150- 200	2,387	10,625	1,112	3,375
200- 250	2,325	12,950	1,175	4,550
250- 300	2,275	15,225	1,225	5,775
300- 350	2,237	17,462	1,262	7,037
350- 400	2,137	19,600	1,362	8,400
400- 450	2,062	21,662	1,437	9,837
450- 500	2,037	23,700	1,462	11,300
500- 550	2,000	25,700	1,500	12,800
550- 600	2,050	27,750	1,450	14,250
600- 650	2,137	29,887	1,362	15,612
650- 700	2,225	32,112	1,275	16,887
700- 750	2,300	34,412	1,200	18,087
750- 800	2,362	36,775	1,137	19,225
800- 850	2,362	39,137	1,137	20,362
850- 900	2,225	41,362	1,275	21,637
900- 950	1,987	43,350	1,512	23,150
950-1000	1,725	45,075	1,775	24,925
1000-1050	1,625	46,700	1,875	26,800
1050-1100	1,637	48,337	1,862	28,662

TABLE 40
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=5+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,100	3,100	400	400
50- 100	2,650	5,750	850	1,250
100- 150	2,500	8,250	1,000	2,250
150- 200	2,425	10,675	1,075	3,325
200- 250	2,375	13,050	1,125	4,450
250- 300	2,312	15,362	1,187	5,637
300- 350	2,262	17,625	1,237	6,875
350- 400	2,188	19,812	1,312	8,187
400- 450	2,112	21,925	1,387	9,575
450- 500	2,075	24,000	1,425	11,000
500- 550	2,062	26,062	1,437	12,437
550- 600	2,200	28,262	1,300	13,737
600- 650	2,337	30,600	1,162	14,900
650- 700	2,325	32,925	1,175	16,075
700- 750	2,337	35,262	1,162	17,237
750- 800	2,387	37,650	1,112	18,350
800- 850	2,400	40,050	1,100	19,450
850- 900	2,325	42,375	1,175	20,625
900- 950	2,125	44,500	1,375	22,000
950-1000	1,900	46,400	1,600	23,600
1000-1050	1,700	48,100	1,800	25,400
1050-1100	1,525	49,625	1,975	27,375

TABLE 41
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=5+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,162	3,162	337	337
50- 100	2,687	5,850	813	1,150
100- 150	2,500	8,350	1,000	2,150
150- 200	2,412	10,762	1,087	3,237
200- 250	2,337	13,100	1,162	4,400
250- 300	2,262	15,362	1,237	5,637
300- 350	2,200	17,562	1,300	6,937
350- 400	2,137	19,700	1,362	8,300
400- 450	2,025	21,725	1,475	9,775
450- 500	1,925	23,650	1,575	11,350
500- 550	1,900	25,550	1,600	12,950
550- 600	2,000	27,550	1,500	14,450
600- 650	2,125	29,675	1,375	15,825
650- 700	2,125	31,800	1,375	17,200
700- 750	2,175	33,975	1,325	18,525
750- 800	2,290	36,265	1,210	19,735
800- 850	2,328	38,593	1,172	20,907
850- 900	2,262	40,855	1,237	22,145
900- 950	2,062	42,918	1,437	23,582
950-1000	1,837	44,755	1,662	25,245
1000-1050	1,650	46,405	1,850	27,095
1050-1100	1,425	47,830	2,075	29,170

TABLE 42
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=7+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,212	3,212	287	287
50- 100	2,925	6,137	575	862
100- 150	2,762	8,900	737	1,600
150- 200	2,650	11,550	850	2,450
200- 250	2,525	14,075	975	3,425
250- 300	2,412	16,487	1,087	4,512
300- 350	2,312	18,800	1,187	5,700
350- 400	2,225	21,025	1,275	6,975
400- 450	2,200	23,225	1,300	8,275
450- 500	2,175	25,400	1,325	9,600
500- 550	2,162	27,562	1,337	10,938
550- 600	2,162	29,725	1,337	12,275
600- 650	2,137	31,862	1,362	13,637
650- 700	2,137	34,000	1,362	15,000
700- 750	2,188	36,187	1,312	16,312
750- 800	2,262	38,450	1,237	17,550
800- 850	2,325	40,775	1,175	18,725
850- 900	2,350	43,125	1,150	19,875
900- 950	2,325	45,450	1,175	21,050
950-1000	2,225	47,675	1,275	22,325
1000-1050	2,050	49,725	1,450	23,775
1050-1100	1,812	51,537	1,687	25,462

TABLE 43
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=7+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,225	3,225	275	275
50- 100	2,875	6,100	625	900
100- 150	2,587	8,687	912	1,812
150- 200	2,450	11,137	1,050	2,862
200- 250	2,387	13,525	1,112	3,975
250- 300	2,300	15,825	1,200	5,175
300- 350	2,225	18,050	1,275	6,450
350- 400	2,188	20,237	1,312	7,762
400- 450	2,175	22,412	1,325	9,087
450- 500	2,175	24,587	1,325	10,412
500- 550	2,162	26,750	1,337	11,750
550- 600	2,150	28,900	1,350	13,100
600- 650	2,175	31,075	1,325	14,425
650- 700	2,250	33,325	1,250	15,675
700- 750	2,350	35,675	1,150	16,825
750- 800	2,412	38,087	1,087	17,912
800- 850	2,387	40,475	1,112	19,025
850- 900	2,300	42,775	1,200	20,225
900- 950	2,125	44,900	1,375	21,600
950-1000	1,800	46,700	1,700	23,300
1000-1050	1,550	48,250	1,950	25,250
1050-1100	1,512	49,762	1,987	27,237

TABLE 44
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=7+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,187	3,187	313	313
50- 100	2,813	6,000	688	1,000
100- 150	2,562	8,562	938	1,937
150- 200	2,462	11,025	1,037	2,975
200- 250	2,425	13,450	1,075	4,050
250- 300	2,387	15,837	1,112	5,162
300- 350	2,300	18,137	1,200	6,362
350- 400	2,212	20,350	1,287	7,650
400- 450	2,175	22,525	1,325	8,975
450- 500	2,162	24,687	1,337	10,312
500- 550	2,137	26,825	1,362	11,675
550- 600	2,112	28,937	1,387	13,062
600- 650	2,175	31,112	1,325	14,387
650- 700	2,300	33,412	1,200	15,587
700- 750	2,375	35,787	1,125	16,712
750- 800	2,387	38,175	1,112	17,825
800- 850	2,400	40,575	1,100	18,925
850- 900	2,375	42,950	1,125	20,050
900- 950	2,188	45,137	1,312	21,362
950-1000	1,837	46,975	1,662	23,025
1000-1050	1,575	48,550	1,925	24,950
1050-1100	1,475	50,025	2,025	26,975

TABLE 45
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=7+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,250	3,250	250	250
50- 100	2,813	6,062	688	938
100- 150	2,512	8,575	987	1,925
150- 200	2,337	10,912	1,162	3,087
200- 250	2,262	13,175	1,237	4,325
250- 300	2,212	15,387	1,287	5,612
300- 350	2,162	17,550	1,337	6,950
350- 400	2,125	19,675	1,375	8,325
400- 450	2,062	21,737	1,437	9,762
450- 500	2,025	23,762	1,475	11,237
500- 550	2,012	25,775	1,487	12,725
550- 600	1,987	27,762	1,512	14,237
600- 650	2,012	29,775	1,487	15,725
650- 700	2,125	31,900	1,375	17,100
700- 750	2,237	34,137	1,262	18,362
750- 800	2,287	36,425	1,212	19,575
800- 850	2,287	38,712	1,212	20,787
850- 900	2,250	40,962	1,250	22,037
900- 950	2,087	43,050	1,412	23,450
950-1000	1,825	44,875	1,675	25,125
1000-1050	1,612	46,487	1,887	27,012
1050-1100	1,487	47,975	2,012	29,025

TABLE 46
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,312	3,312	188	188
50- 100	3,062	6,375	438	625
100- 150	2,912	9,287	587	1,212
150- 200	2,750	12,037	750	1,962
200- 250	2,525	14,562	975	2,937
250- 300	2,375	16,937	1,125	4,063
300- 350	2,312	19,250	1,187	5,250
350- 400	2,262	21,512	1,237	6,487
400- 450	2,250	23,762	1,250	7,737
450- 500	2,250	26,012	1,250	8,987
500- 550	2,250	28,262	1,250	10,237
550- 600	2,237	30,500	1,262	11,500
600- 650	2,212	32,712	1,287	12,787
650- 700	2,212	34,925	1,287	14,075
700- 750	2,250	37,175	1,250	15,325
750- 800	2,300	39,475	1,200	16,525
800- 850	2,350	41,825	1,150	17,675
850- 900	2,375	44,200	1,125	18,800
900- 950	2,337	46,537	1,162	19,962
950-1000	2,225	48,762	1,275	21,237
1000-1050	2,050	50,812	1,450	22,687
1050-1100	1,825	52,637	1,675	24,362
1100-1150	1,600	54,237	1,900	26,262

TABLE 47
AGGRADATION AND/OR DEGRADATION

DATE=6-16-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,300	3,300	200	200
50- 100	2,975	6,275	525	725
100- 150	2,650	8,925	850	1,575
150- 200	2,450	11,375	1,050	2,625
200- 250	2,350	13,725	1,150	3,775
250- 300	2,275	16,000	1,225	5,000
300- 350	2,237	18,237	1,262	6,262
350- 400	2,237	20,475	1,262	7,525
400- 450	2,250	22,725	1,250	8,775
450- 500	2,237	24,962	1,262	10,037
500- 550	2,225	27,187	1,275	11,312
550- 600	2,237	29,425	1,262	12,575
600- 650	2,250	31,675	1,250	13,825
650- 700	2,275	33,950	1,225	15,050
700- 750	2,350	36,300	1,150	16,200
750- 800	2,400	38,700	1,100	17,300
800- 850	2,375	41,075	1,125	18,425
850- 900	2,312	43,387	1,187	19,612
900- 950	2,162	45,550	1,337	20,950
950-1000	2,137	47,687	1,362	22,312
1000-1050	2,125	49,812	1,375	23,687
1050-1100	2,012	51,825	1,487	25,175
1100-1150	1,975	53,800	1,525	26,700

TABLE 48
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,262	3,262	237	237
50- 100	2,950	6,212	550	787
100- 150	2,625	8,837	875	1,662
150- 200	2,412	11,250	1,087	2,750
200- 250	2,300	13,550	1,200	3,950
250- 300	2,225	15,775	1,275	5,225
300- 350	2,200	17,975	1,300	6,525
350- 400	2,212	20,187	1,287	7,813
400- 450	2,237	22,425	1,262	9,075
450- 500	2,225	24,650	1,275	10,350
500- 550	2,188	26,837	1,312	11,662
550- 600	2,188	29,025	1,312	12,975
600- 650	2,212	31,237	1,287	14,262
650- 700	2,237	33,475	1,262	15,525
700- 750	2,300	35,775	1,200	16,725
750- 800	2,375	38,150	1,125	17,850
800- 850	2,400	40,550	1,100	18,950
850- 900	2,350	42,900	1,150	20,100
900- 950	2,200	45,100	1,300	21,400
950-1000	1,962	47,062	1,537	22,937
1000-1050	1,675	48,737	1,825	24,762
1050-1100	1,525	50,262	1,975	26,737
1100-1150	1,512	51,775	1,987	28,725

TABLE 49
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.9L
BOTTOM DATUM = 310

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,325	3,325	175	175
50- 100	2,937	6,262	563	737
100- 150	2,575	8,837	925	1,662
150- 200	2,375	11,212	1,125	2,787
200- 250	2,287	13,500	1,212	4,000
250- 300	2,237	15,737	1,262	5,262
300- 350	2,212	17,950	1,287	6,550
350- 400	2,188	20,137	1,312	7,862
400- 450	2,175	22,312	1,325	9,187
450- 500	2,162	24,475	1,337	10,525
500- 550	2,150	26,625	1,350	11,875
550- 600	2,150	28,775	1,350	13,225
600- 650	2,162	30,937	1,337	14,562
650- 700	2,200	33,137	1,300	15,862
700- 750	2,275	35,412	1,225	17,087
750- 800	2,350	37,762	1,150	18,237
800- 850	2,362	40,125	1,137	19,375
850- 900	2,312	42,437	1,187	20,562
900- 950	2,112	44,550	1,387	21,950
950-1000	1,800	46,350	1,700	23,650
1000-1050	1,587	47,937	1,912	25,562
1050-1100	1,500	49,437	2,000	27,562
1100-1150	1,487	50,925	2,012	29,575

TABLE 50
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=1+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,700	7,600	300	400
100- 150	3,512	11,112	487	887
150- 200	3,287	14,400	712	1,600
200- 250	2,937	17,337	1,062	2,662
250- 300	2,600	19,937	1,400	4,063
300- 350	2,437	22,375	1,563	5,625
350- 400	2,337	24,712	1,662	7,287
400- 450	2,325	27,037	1,675	8,962
450- 500	2,350	29,387	1,650	10,612
500- 550	2,412	31,800	1,587	12,200
550- 600	2,500	34,300	1,500	13,700
600- 650	2,425	36,725	1,575	15,275
650- 700	2,375	39,100	1,625	16,900
700- 750	2,200	41,300	1,800	18,700
750- 800	1,987	43,287	2,012	20,712
800- 850	1,662	44,950	2,337	23,050
850- 900	1,600	46,550	2,400	25,450
900- 950	2,037	48,587	1,962	27,412
950-1000	2,175	50,762	1,825	29,237
1000-1050	2,000	52,762	2,000	31,237
1050-1100	1,912	54,675	2,087	33,325
1100-1150	1,937	56,612	2,062	35,387
1150-1200	1,775	58,387	2,225	37,612
1200-1250	1,275	59,662	2,725	40,337
1250-1300	712	60,375	3,287	43,625
1300-1350	637	61,012	3,362	46,987
1350-1400	987	62,000	3,012	50,000

TABLE 51
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81

DIKE NUMBER=113.5L

BOTTOM DATUM = 300

RANGE NUMBER=1+00A

TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,925	3,925	75	75
50- 100	3,787	7,712	212	287
100- 150	3,650	11,362	350	637
150- 200	3,450	14,812	550	1,187
200- 250	3,125	17,937	875	2,062
250- 300	2,813	20,750	1,187	3,250
300- 350	2,587	23,337	1,412	4,662
350- 400	2,437	25,775	1,563	6,225
400- 450	2,312	28,087	1,687	7,912
450- 500	2,262	30,350	1,737	9,650
500- 550	2,300	32,650	1,700	11,350
550- 600	2,362	35,012	1,637	12,987
600- 650	2,450	37,462	1,550	14,537
650- 700	2,412	39,875	1,587	16,125
700- 750	2,350	42,225	1,650	17,775
750- 800	2,350	44,575	1,650	19,425
800- 850	2,075	46,650	1,925	21,350
850- 900	1,575	48,225	2,425	23,775
900- 950	1,625	49,850	2,375	26,150
950-1000	2,025	51,875	1,975	28,125
1000-1050	2,150	54,025	1,850	29,975
1050-1100	1,975	56,000	2,025	32,000
1100-1150	1,800	57,800	2,200	34,200
1150-1200	1,837	59,637	2,162	36,362
1200-1250	1,687	61,325	2,312	38,675
1250-1300	1,150	62,475	2,850	41,525
1300-1350	587	63,062	3,412	44,937
1350-1400	575	63,637	3,425	48,362

TABLE 52
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=1+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,700	7,600	300	400
100- 150	3,537	11,137	462	862
150- 200	3,375	14,512	625	1,487
200- 250	3,150	17,662	850	2,337
250- 300	2,837	20,500	1,162	3,500
300- 350	2,550	23,050	1,450	4,950
350- 400	2,362	25,412	1,637	6,587
400- 450	2,325	27,737	1,675	8,262
450- 500	2,337	30,075	1,662	9,925
500- 550	2,400	32,475	1,600	11,525
550- 600	2,475	34,950	1,525	13,050
600- 650	2,250	37,200	1,750	14,800
650- 700	2,225	39,425	1,775	16,575
700- 750	2,437	41,862	1,563	18,137
750- 800	2,437	44,300	1,563	19,700
800- 850	1,850	46,150	2,150	21,850
850- 900	1,312	47,462	2,687	24,537
900- 950	1,563	49,025	2,437	26,975
950-1000	1,875	50,900	2,125	29,100
1000-1050	1,987	52,887	2,012	31,112
1050-1100	2,037	54,925	1,962	33,075
1100-1150	1,925	56,850	2,075	35,150
1150-1200	1,787	58,637	2,212	37,362
1200-1250	1,537	60,175	2,462	39,825
1250-1300	900	61,075	3,100	42,925
1300-1350	412	61,487	3,587	46,512
1350-1400	462	61,950	3,537	50,050

TABLE 53
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=1+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,875	3,875	125	125
50- 100	3,625	7,500	375	500
100- 150	3,438	10,938	563	1,062
150- 200	3,287	14,225	712	1,775
200- 250	3,100	17,325	900	2,675
250- 300	2,800	20,125	1,200	3,875
300- 350	2,537	22,662	1,462	5,337
350- 400	2,362	25,025	1,637	6,975
400- 450	2,250	27,275	1,750	8,725
450- 500	2,287	29,562	1,712	10,437
500- 550	2,362	31,925	1,637	12,075
550- 600	2,462	34,387	1,537	13,612
600- 650	2,387	36,775	1,612	15,225
650- 700	2,300	39,075	1,700	16,925
700- 750	2,375	41,450	1,625	18,550
750- 800	2,350	43,800	1,650	20,200
800- 850	1,862	45,662	2,137	22,337
850- 900	1,362	47,025	2,637	24,975
900- 950	1,575	48,600	2,425	27,400
950-1000	1,900	50,500	2,100	29,500
1000-1050	1,987	52,487	2,012	31,512
1050-1100	2,012	54,500	1,987	33,500
1100-1150	1,900	56,400	2,100	35,600
1150-1200	1,775	58,175	2,225	37,825
1200-1250	1,500	59,675	2,500	40,325
1250-1300	925	60,600	3,075	43,400
1300-1350	412	61,012	3,587	46,987
1350-1400	587	61,600	3,412	50,400

TABLE 54
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81

DIKE NUMBER=113.5L

BOTTOM DATUM = 300

RANGE NUMBER=3+00A

TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,887	3,887	112	112
50- 100	3,787	7,675	212	325
100- 150	3,650	11,325	350	675
150- 200	3,462	14,787	537	1,212
200- 250	3,275	18,062	725	1,937
250- 300	3,150	21,212	850	2,787
300- 350	3,075	24,287	925	3,712
350- 400	2,850	27,137	1,150	4,862
400- 450	2,650	29,787	1,350	6,212
450- 500	2,675	32,462	1,325	7,537
500- 550	2,700	35,162	1,300	8,837
550- 600	2,600	37,762	1,400	10,237
600- 650	2,475	40,237	1,525	11,762
650- 700	2,425	42,662	1,575	13,337
700- 750	2,450	45,112	1,550	14,887
750- 800	2,550	47,662	1,450	16,337
800- 850	2,625	50,287	1,375	17,712
850- 900	2,587	52,875	1,412	19,125
900- 950	2,412	55,287	1,587	20,712
950-1000	2,337	57,625	1,662	22,375
1000-1050	2,437	60,062	1,563	23,937
1050-1100	2,437	62,500	1,563	25,500
1100-1150	2,300	64,800	1,700	27,200
1150-1200	2,212	67,012	1,787	28,987
1200-1250	2,287	69,300	1,712	30,700
1250-1300	2,312	71,612	1,687	32,387
1300-1350	2,100	73,712	1,900	34,287
1350-1400	1,775	75,487	2,225	36,512

TABLE 55
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81

DIKE NUMBER=113.5L

BOTTOM DATUM = 300

RANGE NUMBER=3+00A

TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,800	7,700	200	300
100- 150	3,687	11,387	313	612
150- 200	3,550	14,937	450	1,062
200- 250	3,375	18,312	625	1,687
250- 300	3,112	21,425	887	2,575
300- 350	2,850	24,275	1,150	3,725
350- 400	2,662	26,937	1,337	5,062
400- 450	2,600	29,537	1,400	6,462
450- 500	2,650	32,187	1,350	7,813
500- 550	2,662	34,850	1,337	9,150
550- 600	2,575	37,425	1,425	10,575
600- 650	2,525	39,950	1,475	12,050
650- 700	2,550	42,500	1,450	13,500
700- 750	2,575	45,075	1,425	14,925
750- 800	2,587	47,662	1,412	16,337
800- 850	2,525	50,187	1,475	17,812
850- 900	2,387	52,575	1,612	19,425
900- 950	2,337	54,912	1,662	21,087
950-1000	2,425	57,337	1,575	22,662
1000-1050	2,412	59,750	1,587	24,250
1050-1100	2,287	62,037	1,712	25,962
1100-1150	2,325	64,362	1,675	27,637
1150-1200	2,437	66,800	1,563	29,200
1200-1250	2,325	69,125	1,675	30,875
1250-1300	1,950	71,075	2,050	32,925
1300-1350	1,550	72,625	2,450	35,375
1350-1400	1,300	73,925	2,700	38,075

TABLE 56
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81

DIKE NUMBER=113.5L

BOTTOM DATUM = 300

RANGE NUMBER=3+00A

TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,875	3,875	125	125
50- 100	3,737	7,612	262	387
100- 150	3,525	11,137	475	862
150- 200	3,212	14,350	787	1,650
200- 250	2,887	17,237	1,112	2,762
250- 300	2,750	19,987	1,250	4,012
300- 350	2,750	22,737	1,250	5,262
350- 400	2,725	25,462	1,275	6,537
400- 450	2,700	28,162	1,300	7,837
450- 500	2,700	30,862	1,300	9,137
500- 550	2,650	33,512	1,350	10,487
550- 600	2,575	36,087	1,425	11,912
600- 650	2,562	38,650	1,437	13,350
650- 700	2,562	41,212	1,437	14,787
700- 750	2,550	43,762	1,450	16,237
750- 800	2,537	46,300	1,462	17,700
800- 850	2,450	48,750	1,550	19,250
850- 900	2,337	51,087	1,662	20,912
900- 950	2,337	53,425	1,662	22,575
950-1000	2,412	55,837	1,587	24,162
1000-1050	2,350	58,187	1,650	25,812
1050-1100	2,225	60,412	1,775	27,587
1100-1150	2,287	62,700	1,712	29,300
1150-1200	2,362	65,062	1,637	30,937
1200-1250	2,025	67,087	1,975	32,912
1250-1300	1,712	68,800	2,287	35,200
1300-1350	1,587	70,387	2,412	37,612
1350-1400	1,300	71,687	2,700	40,312

TABLE 57
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=3+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,850	3,850	150	150
50- 100	3,750	7,600	250	400
100- 150	3,575	11,175	425	825
150- 200	3,312	14,487	688	1,512
200- 250	3,037	17,525	962	2,475
250- 300	2,837	20,362	1,162	3,637
300- 350	2,762	23,125	1,237	4,875
350- 400	2,725	25,850	1,275	6,150
400- 450	2,675	28,525	1,325	7,475
450- 500	2,637	31,162	1,362	8,837
500- 550	2,612	33,775	1,387	10,225
550- 600	2,575	36,350	1,425	11,650
600- 650	2,500	38,850	1,500	13,150
650- 700	2,450	41,300	1,550	14,700
700- 750	2,487	43,787	1,512	16,212
750- 800	2,487	46,275	1,512	17,725
800- 850	2,437	48,712	1,563	19,287
850- 900	2,362	51,075	1,637	20,925
900- 950	2,287	53,362	1,712	22,637
950-1000	2,262	55,625	1,737	24,375
1000-1050	2,275	57,900	1,725	26,100
1050-1100	2,237	60,137	1,762	27,862
1100-1150	2,262	62,400	1,737	29,600
1150-1200	2,337	64,737	1,662	31,262
1200-1250	2,175	66,912	1,825	33,087
1250-1300	1,912	68,825	2,087	35,175
1300-1350	1,687	70,512	2,312	37,487
1350-1400	1,475	71,987	2,525	40,012

TABLE 58
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=5+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,850	3,850	150	150
50- 100	3,675	7,525	325	475
100- 150	3,650	11,175	350	825
150- 200	3,637	14,812	362	1,187
200- 250	3,562	18,375	438	1,625
250- 300	3,375	21,750	625	2,250
300- 350	3,112	24,862	887	3,137
350- 400	2,925	27,787	1,075	4,212
400- 450	2,837	30,625	1,162	5,375
450- 500	2,750	33,375	1,250	6,625
500- 550	2,687	36,062	1,312	7,937
550- 600	2,675	38,737	1,325	9,262
600- 650	2,675	41,412	1,325	10,587
650- 700	2,650	44,062	1,350	11,937
700- 750	2,625	46,687	1,375	13,312
750- 800	2,612	49,300	1,387	14,700
800- 850	2,600	51,900	1,400	16,100
850- 900	2,575	54,475	1,425	17,525
900- 950	2,500	56,975	1,500	19,025
950-1000	2,475	59,450	1,525	20,550
1000-1050	2,525	61,975	1,475	22,025
1050-1100	2,537	64,512	1,462	23,487
1100-1150	2,487	67,000	1,512	25,000
1150-1200	2,437	69,437	1,563	26,563
1200-1250	2,362	71,800	1,637	28,200
1250-1300	2,200	74,000	1,800	30,000
1300-1350	2,075	76,075	1,925	31,925
1350-1400	2,050	78,125	1,950	33,875
1400-1450	1,925	80,050	2,075	35,950

TABLE 59
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=5+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,837	3,837	162	162
50- 100	3,662	7,500	337	500
100- 150	3,625	11,125	375	875
150- 200	3,575	14,700	425	1,300
200- 250	3,500	18,200	500	1,800
250- 300	3,375	21,575	625	2,425
300- 350	3,125	24,700	875	3,300
350- 400	2,813	27,512	1,187	4,487
400- 450	2,637	30,150	1,362	5,850
450- 500	2,612	32,762	1,387	7,237
500- 550	2,637	35,400	1,362	8,600
550- 600	2,612	38,012	1,387	9,987
600- 650	2,562	40,575	1,437	11,425
650- 700	2,537	43,112	1,462	12,887
700- 750	2,525	45,637	1,475	14,362
750- 800	2,525	48,162	1,475	15,837
800- 850	2,475	50,637	1,525	17,362
850- 900	2,437	53,075	1,563	18,925
900- 950	2,475	55,550	1,525	20,450
950-1000	2,475	58,025	1,525	21,975
1000-1050	2,425	60,450	1,575	23,550
1050-1100	2,387	62,837	1,612	25,162
1100-1150	2,350	65,187	1,650	26,812
1150-1200	2,337	67,525	1,662	28,475
1200-1250	2,225	69,750	1,775	30,250
1250-1300	1,950	71,700	2,050	32,300
1300-1350	1,725	73,425	2,275	34,575
1350-1400	1,550	74,975	2,450	37,025
1400-1450	1,437	76,412	2,562	39,587

TABLE 60
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81

DIKE NUMBER=113.5L

BOTTOM DATUM = 300

RANGE NUMBER=5+00A

TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,850	3,850	150	150
50- 100	3,675	7,525	325	475
100- 150	3,637	11,162	362	837
150- 200	3,612	14,775	387	1,225
200- 250	3,550	18,325	450	1,675
250- 300	3,375	21,700	625	2,300
300- 350	3,125	24,825	875	3,175
350- 400	2,950	27,775	1,050	4,225
400- 450	2,875	30,650	1,125	5,350
450- 500	2,813	33,462	1,187	6,537
500- 550	2,775	36,237	1,225	7,762
550- 600	2,762	39,000	1,237	9,000
600- 650	2,750	41,750	1,250	10,250
650- 700	2,737	44,487	1,262	11,512
700- 750	2,712	47,200	1,287	12,800
750- 800	2,675	49,875	1,325	14,125
800- 850	2,587	52,462	1,412	15,537
850- 900	2,500	54,962	1,500	17,037
900- 950	2,462	57,425	1,537	18,575
950-1000	2,462	59,887	1,537	20,112
1000-1050	2,475	62,362	1,525	21,637
1050-1100	2,487	64,850	1,512	23,150
1100-1150	2,475	67,325	1,525	24,675
1150-1200	2,350	69,675	1,650	26,325
1200-1250	2,075	71,750	1,925	28,250
1250-1300	1,775	73,525	2,225	30,475
1300-1350	1,662	75,187	2,337	32,813
1350-1400	1,612	76,800	2,387	35,200
1400-1450	1,550	78,350	2,450	37,650

TABLE 61
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=5+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,850	3,850	150	150
50- 100	3,662	7,512	337	487
100- 150	3,612	11,125	387	875
150- 200	3,575	14,700	425	1,300
200- 250	3,500	18,200	500	1,800
250- 300	3,375	21,575	625	2,425
300- 350	3,125	24,700	875	3,300
350- 400	2,825	27,525	1,175	4,475
400- 450	2,687	30,212	1,312	5,787
450- 500	2,662	32,875	1,337	7,125
500- 550	2,650	35,525	1,350	8,475
550- 600	2,650	38,175	1,350	9,825
600- 650	2,637	40,812	1,362	11,187
650- 700	2,625	43,437	1,375	12,562
700- 750	2,612	46,050	1,387	13,950
750- 800	2,587	48,637	1,412	15,362
800- 850	2,525	51,162	1,475	16,837
850- 900	2,437	53,600	1,563	18,400
900- 950	2,387	55,987	1,612	20,012
950-1000	2,412	58,400	1,587	21,600
1000-1050	2,475	60,875	1,525	23,125
1050-1100	2,500	63,375	1,500	24,625
1100-1150	2,450	65,825	1,550	26,175
1150-1200	2,262	68,087	1,737	27,912
1200-1250	1,962	70,050	2,037	29,950
1250-1300	1,812	71,862	2,188	32,137
1300-1350	1,750	73,612	2,250	34,387
1350-1400	1,650	75,262	2,350	36,737
1400-1450	1,437	76,700	2,562	39,300

TABLE 62
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=7+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,800	3,800	200	200
50- 100	3,537	7,337	462	662
100- 150	3,550	10,887	450	1,112
150- 200	3,625	14,512	375	1,487
200- 250	3,562	18,075	438	1,925
250- 300	3,425	21,500	575	2,500
300- 350	3,287	24,787	712	3,212
350- 400	3,200	27,987	800	4,012
400- 450	3,137	31,125	862	4,875
450- 500	3,000	34,125	1,000	5,875
500- 550	2,825	36,950	1,175	7,050
550- 600	2,725	39,675	1,275	8,325
600- 650	2,712	42,387	1,287	9,612
650- 700	2,750	45,137	1,250	10,862
700- 750	2,762	47,900	1,237	12,100
750- 800	2,700	50,600	1,300	13,400
800- 850	2,637	53,237	1,362	14,762
850- 900	2,612	55,850	1,387	16,150
900- 950	2,575	58,425	1,425	17,575
950-1000	2,537	60,962	1,462	19,037
1000-1050	2,537	63,500	1,462	20,500
1050-1100	2,537	66,037	1,462	21,962
1100-1150	2,487	68,525	1,512	23,475
1150-1200	2,425	70,950	1,575	25,050
1200-1250	2,362	73,312	1,637	26,687
1250-1300	2,225	75,537	1,775	28,462
1300-1350	2,037	77,575	1,962	30,425
1350-1400	1,937	79,512	2,062	32,487
1400-1450	1,875	81,387	2,125	34,612

TABLE 63
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=7+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,825	3,825	175	175
50- 100	3,562	7,387	438	612
100- 150	3,537	10,925	462	1,075
150- 200	3,600	14,525	400	1,475
200- 250	3,575	18,100	425	1,900
250- 300	3,487	21,587	512	2,412
300- 350	3,337	24,925	662	3,075
350- 400	3,112	28,037	887	3,962
400- 450	2,937	30,975	1,062	5,025
450- 500	2,787	33,762	1,212	6,237
500- 550	2,662	36,425	1,337	7,575
550- 600	2,675	39,100	1,325	8,900
600- 650	2,700	41,800	1,300	10,200
650- 700	2,675	44,475	1,325	11,525
700- 750	2,600	47,075	1,400	12,925
750- 800	2,550	49,625	1,450	14,375
800- 850	2,525	52,150	1,475	15,850
850- 900	2,475	54,625	1,525	17,375
900- 950	2,450	57,075	1,550	18,925
950-1000	2,462	59,537	1,537	20,462
1000-1050	2,450	61,987	1,550	22,012
1050-1100	2,412	64,400	1,587	23,600
1100-1150	2,375	66,775	1,625	25,225
1150-1200	2,287	69,062	1,712	26,937
1200-1250	2,188	71,250	1,812	28,750
1250-1300	2,100	73,350	1,900	30,650
1300-1350	2,000	75,350	2,000	32,650
1350-1400	1,887	77,237	2,112	34,762
1400-1450	1,762	79,000	2,237	37,000

TABLE 64
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81

DIKE NUMBER=113.5L

BOTTOM DATUM = 300

RANGE NUMBER=7+00A

TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,775	3,775	225	225
50- 100	3,525	7,300	475	700
100- 150	3,537	10,837	462	1,162
150- 200	3,612	14,450	387	1,550
200- 250	3,550	18,000	450	2,000
250- 300	3,412	21,412	587	2,587
300- 350	3,262	24,675	737	3,325
350- 400	3,175	27,850	825	4,150
400- 450	3,112	30,962	887	5,037
450- 500	2,975	33,937	1,025	6,062
500- 550	2,837	36,775	1,162	7,225
550- 600	2,775	39,550	1,225	8,450
600- 650	2,750	42,300	1,250	9,700
650- 700	2,775	45,075	1,225	10,925
700- 750	2,800	47,875	1,200	12,125
750- 800	2,700	50,575	1,300	13,425
800- 850	2,587	53,162	1,412	14,837
850- 900	2,550	55,712	1,450	16,287
900- 950	2,562	58,275	1,437	17,725
950-1000	2,575	60,850	1,425	19,150
1000-1050	2,525	63,375	1,475	20,625
1050-1100	2,475	65,850	1,525	22,150
1100-1150	2,400	68,250	1,600	23,750
1150-1200	2,237	70,487	1,762	25,512
1200-1250	2,062	72,550	1,937	27,450
1250-1300	1,950	74,500	2,050	29,500
1300-1350	1,837	76,337	2,162	31,662
1350-1400	1,712	78,050	2,287	33,950
1400-1450	1,600	79,650	2,400	36,350

TABLE 65
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=7+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,825	3,825	175	175
50- 100	3,575	7,400	425	600
100- 150	3,562	10,962	438	1,037
150- 200	3,625	14,587	375	1,412
200- 250	3,575	18,162	425	1,837
250- 300	3,438	21,600	563	2,400
300- 350	3,287	24,887	712	3,112
350- 400	3,162	28,050	837	3,950
400- 450	3,050	31,100	950	4,900
450- 500	2,887	33,987	1,112	6,012
500- 550	2,725	36,712	1,275	7,287
550- 600	2,687	39,400	1,312	8,600
600- 650	2,700	42,100	1,300	9,900
650- 700	2,700	44,800	1,300	11,200
700- 750	2,687	47,487	1,312	12,512
750- 800	2,612	50,100	1,387	13,900
800- 850	2,512	52,612	1,487	15,387
850- 900	2,462	55,075	1,537	16,925
900- 950	2,450	57,525	1,550	18,475
950-1000	2,475	60,000	1,525	20,000
1000-1050	2,475	62,475	1,525	21,525
1050-1100	2,437	64,912	1,563	23,087
1100-1150	2,375	67,287	1,625	24,712
1150-1200	2,237	69,525	1,762	26,475
1200-1250	2,025	71,550	1,975	28,450
1250-1300	1,812	73,362	2,188	30,637
1300-1350	1,712	75,075	2,287	32,925
1350-1400	1,650	76,725	2,350	35,275
1400-1450	1,587	78,312	2,412	37,687

TABLE 66
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,725	3,725	275	275
50- 100	3,425	7,150	575	850
100- 150	3,400	10,550	600	1,450
150- 200	3,512	14,063	487	1,937
200- 250	3,575	17,637	425	2,362
250- 300	3,525	21,162	475	2,837
300- 350	3,425	24,587	575	3,412
350- 400	3,350	27,937	650	4,063
400- 450	3,300	31,237	700	4,762
450- 500	3,187	34,425	813	5,575
500- 550	2,962	37,387	1,037	6,612
550- 600	2,800	40,187	1,200	7,813
600- 650	2,762	42,950	1,237	9,050
650- 700	2,750	45,700	1,250	10,300
700- 750	2,737	48,438	1,262	11,562
750- 800	2,687	51,125	1,312	12,875
800- 850	2,625	53,750	1,375	14,250
850- 900	2,550	56,300	1,450	15,700
900- 950	2,462	58,762	1,537	17,237
950-1000	2,412	61,175	1,587	18,825
1000-1050	2,375	63,550	1,625	20,450
1050-1100	2,325	65,875	1,675	22,125
1100-1150	2,287	68,162	1,712	23,837
1150-1200	2,250	70,412	1,750	25,587
1200-1250	2,200	72,612	1,800	27,387
1250-1300	2,100	74,712	1,900	29,287
1300-1350	1,912	76,625	2,087	31,375
1350-1400	1,737	78,362	2,262	33,637
1400-1450	1,675	80,037	2,325	35,962
1450-1500	1,712	81,750	2,287	38,250

TABLE 67
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,737	3,737	262	262
50- 100	3,438	7,175	563	825
100- 150	3,425	10,600	575	1,400
150- 200	3,562	14,162	438	1,837
200- 250	3,612	17,775	387	2,225
250- 300	3,575	21,350	425	2,650
300- 350	3,525	24,875	475	3,125
350- 400	3,475	28,350	525	3,650
400- 450	3,375	31,725	625	4,275
450- 500	3,125	34,850	875	5,150
500- 550	2,875	37,725	1,125	6,275
550- 600	2,775	40,500	1,225	7,500
600- 650	2,750	43,250	1,250	8,750
650- 700	2,725	45,975	1,275	10,025
700- 750	2,675	48,650	1,325	11,350
750- 800	2,637	51,287	1,362	12,712
800- 850	2,612	53,900	1,387	14,100
850- 900	2,550	56,450	1,450	15,550
900- 950	2,475	58,925	1,525	17,075
950-1000	2,425	61,350	1,575	18,650
1000-1050	2,375	63,725	1,625	20,275
1050-1100	2,337	66,062	1,662	21,937
1100-1150	2,287	68,350	1,712	23,650
1150-1200	2,188	70,537	1,812	25,462
1200-1250	2,037	72,575	1,962	27,425
1250-1300	1,887	74,462	2,112	29,537
1300-1350	1,862	76,325	2,137	31,675
1350-1400	1,900	78,225	2,100	33,775
1400-1450	1,875	80,100	2,125	35,900
1450-1500	1,775	81,875	2,225	38,125

TABLE 68
AGGRADATION AND/OR DEGRADATION

DATE=9-15-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,662	3,662	337	337
50- 100	3,400	7,062	600	938
100- 150	3,387	10,450	612	1,550
150- 200	3,500	13,950	500	2,050
200- 250	3,562	17,512	438	2,487
250- 300	3,512	21,025	487	2,975
300- 350	3,412	24,437	587	3,562
350- 400	3,350	27,787	650	4,212
400- 450	3,287	31,075	712	4,925
450- 500	3,175	34,250	825	5,750
500- 550	3,212	37,462	787	6,537
550- 600	3,062	40,525	938	7,475
600- 650	2,775	43,300	1,225	8,700
650- 700	2,725	46,025	1,275	9,975
700- 750	2,737	48,762	1,262	11,237
750- 800	2,725	51,487	1,275	12,512
800- 850	2,637	54,125	1,362	13,875
850- 900	2,550	56,675	1,450	15,325
900- 950	2,500	59,175	1,500	16,825
950-1000	2,500	61,675	1,500	18,325
1000-1050	2,512	64,187	1,487	19,812
1050-1100	2,475	66,662	1,525	21,337
1100-1150	2,387	69,050	1,612	22,950
1150-1200	2,250	71,300	1,750	24,700
1200-1250	2,112	73,412	1,887	26,587
1250-1300	2,062	75,475	1,937	28,525
1300-1350	2,000	77,475	2,000	30,525
1350-1400	1,850	79,325	2,150	32,675
1400-1450	1,675	81,000	2,325	35,000
1450-1500	1,563	82,562	2,437	37,437

TABLE 69
AGGRADATION AND/OR DEGRADATION

DATE=10-17-81
DIKE NUMBER=113.5L
BOTTOM DATUM = 300

RANGE NUMBER=9+00A
TOP DATUM = 380

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,725	3,725	275	275
50- 100	3,438	7,162	563	837
100- 150	3,425	10,587	575	1,412
150- 200	3,512	14,100	487	1,900
200- 250	3,562	17,662	438	2,337
250- 300	3,537	21,200	462	2,800
300- 350	3,475	24,675	525	3,325
350- 400	3,438	28,112	563	3,887
400- 450	3,362	31,475	637	4,525
450- 500	3,225	34,700	775	5,300
500- 550	3,012	37,712	987	6,287
550- 600	2,862	40,575	1,137	7,425
600- 650	2,837	43,412	1,162	8,587
650- 700	2,813	46,225	1,187	9,775
700- 750	2,750	48,975	1,250	11,025
750- 800	2,662	51,637	1,337	12,362
800- 850	2,587	54,225	1,412	13,775
850- 900	2,487	56,712	1,512	15,287
900- 950	2,425	59,137	1,575	16,862
950-1000	2,425	61,562	1,575	18,437
1000-1050	2,425	63,987	1,575	20,012
1050-1100	2,362	66,350	1,637	21,650
1100-1150	2,237	68,587	1,762	23,412
1150-1200	2,125	70,712	1,875	25,287
1200-1250	1,987	72,700	2,012	27,300
1250-1300	1,850	74,550	2,150	29,450
1300-1350	1,762	76,312	2,237	31,687
1350-1400	1,637	77,950	2,362	34,050
1400-1450	1,450	79,400	2,550	36,600
1450-1500	1,362	80,762	2,637	39,237

TABLE 70
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=1+00
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,200	3,200	400	400
50- 100	2,675	5,875	925	1,325
100- 150	2,375	8,250	1,225	2,550
150- 200	2,275	10,525	1,325	3,875
200- 250	2,325	12,850	1,275	5,150
250- 300	2,325	15,175	1,275	6,425
300- 350	2,262	17,437	1,337	7,762
350- 400	2,137	19,575	1,462	9,225
400- 450	2,100	21,675	1,500	10,725
450- 500	2,062	23,737	1,537	12,262
500- 550	1,937	25,675	1,662	13,925
550- 600	1,875	27,550	1,725	15,650
600- 650	1,775	29,325	1,825	17,475
650- 700	1,725	31,050	1,875	19,350
700- 750	1,775	32,825	1,825	21,175
750- 800	1,787	34,612	1,812	22,987
800- 850	1,737	36,350	1,862	24,850
850- 900	1,425	37,775	2,175	27,025

TABLE 71
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=1+00
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,125	3,125	475	475
50- 100	2,462	5,587	1,137	1,612
100- 150	2,250	7,837	1,350	2,962
150- 200	2,300	10,137	1,300	4,262
200- 250	2,300	12,437	1,300	5,562
250- 300	2,225	14,662	1,375	6,937
300- 350	2,137	16,800	1,462	8,400
350- 400	2,012	18,812	1,587	9,987
400- 450	1,900	20,712	1,700	11,687
450- 500	1,862	22,575	1,737	13,425
500- 550	1,787	24,362	1,812	15,237
550- 600	1,687	26,050	1,912	17,150
600- 650	1,625	27,675	1,975	19,125
650- 700	1,612	29,287	1,987	21,112
700- 750	1,662	30,950	1,937	23,050
750- 800	1,600	32,550	2,000	25,050
800- 850	1,325	33,875	2,275	27,325
850- 900	962	34,837	2,637	29,962

TABLE 72
AGGRADATION AND/OR DEGRADATION

DATE=9-18-81

DIKE NUMBER=103.3R

BOTTOM DATUM = 300

RANGE NUMBER=1+00

TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,125	3,125	475	475
50- 100	2,500	5,625	1,100	1,575
100- 150	2,275	7,900	1,325	2,900
150- 200	2,300	10,200	1,300	4,200
200- 250	2,375	12,575	1,225	5,425
250- 300	2,375	14,950	1,225	6,650
300- 350	2,212	17,162	1,387	8,037
350- 400	2,012	19,175	1,587	9,625
400- 450	1,925	21,100	1,675	11,300
450- 500	1,875	22,975	1,725	13,025
500- 550	1,800	24,775	1,800	14,825
550- 600	1,650	26,425	1,950	16,775
600- 650	1,563	27,987	2,037	18,812
650- 700	1,587	29,575	2,012	20,825
700- 750	1,575	31,150	2,025	22,850
750- 800	1,487	32,637	2,112	24,962
800- 850	1,087	33,725	2,512	27,475
850- 900	650	34,375	2,950	30,425

TABLE 73
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=1+00
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,212	3,212	387	387
50- 100	2,687	5,900	912	1,300
100- 150	2,375	8,275	1,225	2,525
150- 200	2,275	10,550	1,325	3,850
200- 250	2,325	12,875	1,275	5,125
250- 300	2,350	15,225	1,250	6,375
300- 350	2,237	17,462	1,362	7,737
350- 400	2,125	19,587	1,475	9,212
400- 450	2,087	21,675	1,512	10,725
450- 500	2,037	23,712	1,563	12,287
500- 550	2,000	25,712	1,600	13,887
550- 600	1,862	27,575	1,737	15,625
600- 650	1,712	29,287	1,887	17,512
650- 700	1,712	31,000	1,887	19,400
700- 750	1,750	32,750	1,850	21,250
750- 800	1,725	34,475	1,875	23,125
800- 850	1,500	35,975	2,100	25,225
850- 900	975	36,950	2,625	27,850

TABLE 74
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=3+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,350	3,350	250	250
50- 100	2,875	6,225	725	975
100- 150	2,500	8,725	1,100	2,075
150- 200	2,362	11,087	1,237	3,312
200- 250	2,362	13,450	1,237	4,550
250- 300	2,337	15,787	1,262	5,812
300- 350	2,312	18,100	1,287	7,100
350- 400	2,275	20,375	1,325	8,425
400- 450	2,250	22,625	1,350	9,775
450- 500	2,237	24,862	1,362	11,137
500- 550	2,200	27,062	1,400	12,537
550- 600	2,137	29,200	1,462	14,000
600- 650	2,050	31,250	1,550	15,550
650- 700	1,962	33,212	1,637	17,188
700- 750	1,862	35,075	1,737	18,925
750- 800	1,862	36,937	1,737	20,662
800- 850	1,812	38,750	1,787	22,450

TABLE 75
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=3+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,200	3,200	400	400
50- 100	2,575	5,775	1,025	1,425
100- 150	2,300	8,075	1,300	2,725
150- 200	2,262	10,337	1,337	4,063
200- 250	2,262	12,600	1,337	5,400
250- 300	2,225	14,825	1,375	6,775
300- 350	2,200	17,025	1,400	8,175
350- 400	2,188	19,212	1,412	9,587
400- 450	2,162	21,375	1,437	11,025
450- 500	2,112	23,487	1,487	12,512
500- 550	2,037	25,525	1,563	14,075
550- 600	1,950	27,475	1,650	15,725
600- 650	1,887	29,362	1,712	17,437
650- 700	1,837	31,200	1,762	19,200
700- 750	1,800	33,000	1,800	21,000
750- 800	1,800	34,800	1,800	22,800
800- 850	1,650	36,450	1,950	24,750

TABLE 76
AGGRADATION AND/OR DEGRADATION

DATE=9-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=3+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,225	3,225	375	375
50- 100	2,625	5,850	975	1,350
100- 150	2,325	8,175	1,275	2,625
150- 200	2,262	10,437	1,337	3,962
200- 250	2,287	12,725	1,312	5,275
250- 300	2,287	15,012	1,312	6,587
300- 350	2,237	17,250	1,362	7,950
350- 400	2,200	19,450	1,400	9,350
400- 450	2,188	21,637	1,412	10,762
450- 500	2,150	23,787	1,450	12,212
500- 550	2,062	25,850	1,537	13,750
550- 600	1,962	27,812	1,637	15,387
600- 650	1,887	29,700	1,712	17,100
650- 700	1,800	31,500	1,800	18,900
700- 750	1,775	33,275	1,825	20,725
750- 800	1,700	34,975	1,900	22,625
800- 850	1,525	36,500	2,075	24,700

TABLE 77
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=3+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,300	3,300	300	300
50- 100	2,675	5,975	925	1,225
100- 150	2,312	8,287	1,287	2,512
150- 200	2,287	10,575	1,312	3,825
200- 250	2,300	12,875	1,300	5,125
250- 300	2,300	15,175	1,300	6,425
300- 350	2,300	17,475	1,300	7,725
350- 400	2,300	19,775	1,300	9,025
400- 450	2,300	22,075	1,300	10,325
450- 500	2,300	24,375	1,300	11,625
500- 550	2,275	26,650	1,325	12,950
550- 600	2,150	28,800	1,450	14,400
600- 650	1,912	30,712	1,687	16,087
650- 700	1,712	32,425	1,887	17,975
700- 750	1,625	34,050	1,975	19,950
750- 800	1,600	35,650	2,000	21,950
800- 850	1,425	37,075	2,175	24,125

TABLE 78
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=5+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,325	3,325	275	275
50- 100	3,025	6,350	575	850
100- 150	2,512	8,862	1,087	1,937
150- 200	2,087	10,950	1,512	3,450
200- 250	2,000	12,950	1,600	5,050
250- 300	2,100	15,050	1,500	6,550
300- 350	2,225	17,275	1,375	7,925
350- 400	2,250	19,525	1,350	9,275
400- 450	2,225	21,750	1,375	10,650
450- 500	2,125	23,875	1,475	12,125
500- 550	2,012	25,887	1,587	13,712
550- 600	1,937	27,825	1,662	15,375
600- 650	1,850	29,675	1,750	17,125
650- 700	1,775	31,450	1,825	18,950
700- 750	1,800	33,250	1,800	20,750

TABLE 79
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=5+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,250	3,250	350	350
50- 100	2,737	5,987	862	1,212
100- 150	2,262	8,250	1,337	2,550
150- 200	2,050	10,300	1,550	4,100
200- 250	2,050	12,350	1,550	5,650
250- 300	2,175	14,525	1,425	7,075
300- 350	2,275	16,800	1,325	8,400
350- 400	2,287	19,087	1,312	9,712
400- 450	2,212	21,300	1,387	11,100
450- 500	2,087	23,387	1,512	12,612
500- 550	1,987	25,375	1,612	14,225
550- 600	1,887	27,262	1,712	15,937
600- 650	1,837	29,100	1,762	17,700
650- 700	1,862	30,962	1,737	19,437
700- 750	1,825	32,787	1,775	21,212

TABLE 80
AGGRADATION AND/OR DEGRADATION

DATE=9-18-81

DIKE NUMBER=103.3R

BOTTOM DATUM = 300

RANGE NUMBER=5+00A

TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,250	3,250	350	350
50- 100	2,750	6,000	850	1,200
100- 150	2,275	8,275	1,325	2,525
150- 200	2,050	10,325	1,550	4,075
200- 250	2,075	12,400	1,525	5,600
250- 300	2,225	14,625	1,375	6,975
300- 350	2,362	16,987	1,237	8,212
350- 400	2,412	19,400	1,187	9,400
400- 450	2,275	21,675	1,325	10,725
450- 500	2,100	23,775	1,500	12,225
500- 550	2,000	25,775	1,600	13,825
550- 600	1,925	27,700	1,675	15,500
600- 650	1,912	29,612	1,687	17,188
650- 700	1,900	31,512	1,700	18,887
700- 750	1,787	33,300	1,812	20,700

TABLE 81
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81

DIKE NUMBER=103.3R

BOTTOM DATUM = 300

RANGE NUMBER=5+00A

TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,250	3,250	350	350
50- 100	2,825	6,075	775	1,125
100- 150	2,450	8,525	1,150	2,275
150- 200	2,162	10,687	1,437	3,712
200- 250	2,100	12,787	1,500	5,212
250- 300	2,212	15,000	1,387	6,600
300- 350	2,312	17,312	1,287	7,887
350- 400	2,337	19,650	1,262	9,150
400- 450	2,237	21,887	1,362	10,512
450- 500	2,137	24,025	1,462	11,975
500- 550	2,050	26,075	1,550	13,525
550- 600	1,912	27,987	1,687	15,212
600- 650	1,862	29,850	1,737	16,950
650- 700	1,900	31,750	1,700	18,650
700- 750	1,837	33,587	1,762	20,412

TABLE 82
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81

DIKE NUMBER=103.3R

BOTTOM DATUM = 300

RANGE NUMBER=7+00A

TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,037	3,037	563	563
50- 100	2,375	5,412	1,225	1,787
100- 150	1,900	7,312	1,700	3,487
150- 200	1,950	9,262	1,650	5,137
200- 250	2,062	11,325	1,537	6,675
250- 300	2,137	13,462	1,462	8,137
300- 350	2,125	15,587	1,475	9,612
350- 400	2,075	17,662	1,525	11,137
400- 450	2,025	19,687	1,575	12,712
450- 500	1,925	21,612	1,675	14,387
500- 550	1,812	23,425	1,787	16,175
550- 600	1,787	25,212	1,812	17,987
600- 650	1,775	26,987	1,825	19,812

TABLE 83
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=7+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,962	2,962	637	637
50- 100	2,325	5,287	1,275	1,912
100- 150	1,937	7,225	1,662	3,575
150- 200	2,037	9,262	1,563	5,137
200- 250	2,200	11,462	1,400	6,537
250- 300	2,225	13,687	1,375	7,912
300- 350	2,175	15,862	1,425	9,337
350- 400	2,125	17,987	1,475	10,812
400- 450	2,050	20,037	1,550	12,362
450- 500	1,937	21,975	1,662	14,025
500- 550	1,850	23,825	1,750	15,775
550- 600	1,837	25,662	1,762	17,537
600- 650	1,825	27,487	1,775	19,312

TABLE 84
AGGRADATION AND/OR DEGRADATION

DATE=9-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=7+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,912	2,912	688	688
50- 100	2,275	5,187	1,325	2,012
100- 150	2,025	7,212	1,575	3,587
150- 200	2,188	9,400	1,412	5,000
200- 250	2,262	11,662	1,337	6,337
250- 300	2,225	13,887	1,375	7,712
300- 350	2,175	16,062	1,425	9,137
350- 400	2,125	18,187	1,475	10,612
400- 450	2,025	20,212	1,575	12,187
450- 500	1,887	22,100	1,712	13,900
500- 550	1,837	23,937	1,762	15,662
550- 600	1,825	25,762	1,775	17,437
600- 650	1,787	27,550	1,812	19,250

TABLE 85
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=7+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,937	2,937	662	662
50- 100	2,287	5,225	1,312	1,975
100- 150	2,050	7,275	1,550	3,525
150- 200	2,188	9,462	1,412	4,937
200- 250	2,275	11,737	1,325	6,262
250- 300	2,325	14,063	1,275	7,537
300- 350	2,275	16,337	1,325	8,862
350- 400	2,212	18,550	1,387	10,250
400- 450	2,125	20,675	1,475	11,725
450- 500	2,000	22,675	1,600	13,325
500- 550	1,887	24,562	1,712	15,037
550- 600	1,850	26,412	1,750	16,787
600- 650	1,850	28,262	1,750	18,537

TABLE 86
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81

DIKE NUMBER=103.3R

BOTTOM DATUM = 300

RANGE NUMBER=9+00A

TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,025	3,025	575	575
50- 100	2,450	5,475	1,150	1,725
100- 150	1,925	7,400	1,675	3,400
150- 200	1,812	9,212	1,787	5,187
200- 250	1,862	11,075	1,737	6,925
250- 300	1,950	13,025	1,650	8,575
300- 350	2,025	15,050	1,575	10,150
350- 400	2,075	17,125	1,525	11,675
400- 450	2,087	19,212	1,512	13,187
450- 500	1,962	21,175	1,637	14,825
500- 550	1,750	22,925	1,850	16,675
550- 600	1,675	24,600	1,925	18,600

TABLE 87
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=9+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,912	2,912	688	688
50- 100	2,300	5,212	1,300	1,987
100- 150	1,950	7,162	1,650	3,637
150- 200	1,975	9,137	1,625	5,262
200- 250	2,062	11,200	1,537	6,800
250- 300	2,125	13,325	1,475	8,275
300- 350	2,162	15,487	1,437	9,712
350- 400	2,162	17,650	1,437	11,150
400- 450	2,112	19,762	1,487	12,637
450- 500	1,987	21,750	1,612	14,250
500- 550	1,850	23,600	1,750	16,000
550- 600	1,825	25,425	1,775	17,775

TABLE 88
AGGRADATION AND/OR DEGRADATION

DATE=9-18-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=9+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,925	2,925	675	675
50- 100	2,312	5,237	1,287	1,962
100- 150	2,012	7,250	1,587	3,550
150- 200	2,075	9,325	1,525	5,075
200- 250	2,137	11,462	1,462	6,537
250- 300	2,200	13,662	1,400	7,937
300- 350	2,237	15,900	1,362	9,300
350- 400	2,225	18,125	1,375	10,675
400- 450	2,137	20,262	1,462	12,137
450- 500	1,975	22,237	1,625	13,762
500- 550	1,837	24,075	1,762	15,525
550- 600	1,800	25,875	1,800	17,325

TABLE 89
AGGRADATION AND/OR DEGRADATION

DATE=10-16-81
DIKE NUMBER=103.3R
BOTTOM DATUM = 300

RANGE NUMBER=9+00A
TOP DATUM = 372

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,962	2,962	637	637
50- 100	2,425	5,387	1,175	1,812
100- 150	2,062	7,450	1,537	3,350
150- 200	2,050	9,500	1,550	4,900
200- 250	2,150	11,650	1,450	6,350
250- 300	2,212	13,862	1,387	7,737
300- 350	2,225	16,087	1,375	9,112
350- 400	2,225	18,312	1,375	10,487
400- 450	2,188	20,500	1,412	11,900
450- 500	2,037	22,537	1,563	13,462
500- 550	1,875	24,412	1,725	15,187
550- 600	1,837	26,250	1,762	16,950

TABLE 90
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,587	2,587	1,362	1,362
50- 100	1,925	4,512	2,025	3,387
100- 150	1,675	6,187	2,275	5,662
150- 200	1,600	7,787	2,350	8,012
200- 250	1,712	9,500	2,237	10,250
250- 300	1,762	11,262	2,188	12,437
300- 350	1,650	12,912	2,300	14,737
350- 400	1,600	14,512	2,350	17,087
400- 450	1,500	16,012	2,450	19,537
450- 500	1,375	17,387	2,575	22,112
500- 550	1,425	18,812	2,525	24,637
550- 600	1,275	20,087	2,675	27,312
600- 650	962	21,050	2,987	30,300
650- 700	1,287	22,337	2,662	32,962
700- 750	1,975	24,312	1,975	34,937
750- 800	1,575	25,887	2,375	37,312
800- 850	875	26,762	3,075	40,387
850- 900	862	27,625	3,087	43,475
900- 950	938	28,562	3,012	46,487
950-1000	950	29,512	3,000	49,487
1000-1050	900	30,412	3,050	52,537
1050-1100	925	31,337	3,025	55,562

TABLE 91

AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
 DIKE NUMBER=103.2L
 BOTTOM DATUM = 290

RANGE NUMBER=1+00
 TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	2,887	2,887	1,062	1,062
50- 100	2,300	5,187	1,650	2,712
100- 150	1,775	6,962	2,175	4,887
150- 200	1,637	8,600	2,312	7,200
200- 250	1,675	10,275	2,275	9,475
250- 300	1,787	12,062	2,162	11,637
300- 350	1,737	13,800	2,212	13,850
350- 400	1,637	15,437	2,312	16,162
400- 450	1,550	16,987	2,400	18,562
450- 500	1,437	18,425	2,512	21,075
500- 550	1,512	19,937	2,437	23,512
550- 600	1,412	21,350	2,537	26,050
600- 650	1,087	22,437	2,862	28,912
650- 700	1,425	23,862	2,525	31,437
700- 750	2,050	25,912	1,900	33,337
750- 800	1,550	27,462	2,400	35,737
800- 850	875	28,337	3,075	38,812
850- 900	875	29,212	3,075	41,887
900- 950	950	30,162	3,000	44,887
950-1000	1,000	31,162	2,950	47,837
1000-1050	1,025	32,187	2,925	50,762
1050-1100	1,050	33,237	2,900	53,662

AD-A121 583

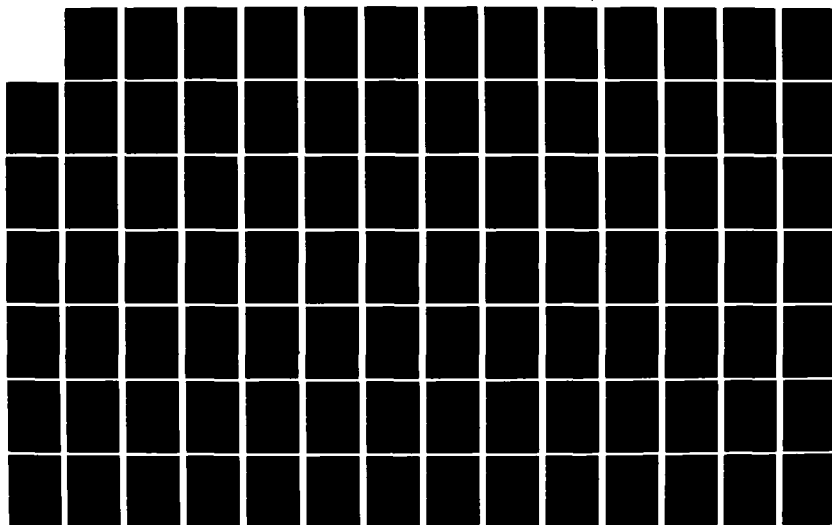
THE INFLUENCE OF CHANNEL REGULATING STRUCTURES ON FISH
AND WILDLIFE HABIT. (U) MISSOURI UNIV-ROLLA INST OF
RIVER STUDIES R H SMITH ET AL. AUG 82 DACW43-81-C-0061

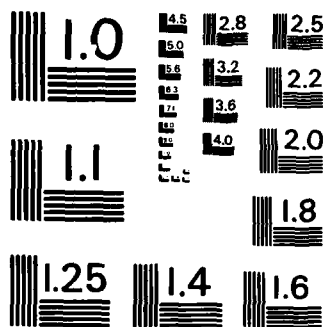
273

UNCLASSIFIED

F/G 13/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 92
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,387	3,387	563	563
50- 100	2,675	6,062	1,275	1,837
100- 150	2,312	8,375	1,637	3,475
150- 200	2,150	10,525	1,800	5,275
200- 250	2,050	12,575	1,900	7,175
250- 300	2,075	14,650	1,875	9,050
300- 350	2,250	16,900	1,700	10,750
350- 400	2,425	19,325	1,525	12,275
400- 450	2,525	21,850	1,425	13,700
450- 500	2,425	24,275	1,525	15,225
500- 550	2,025	26,300	1,925	17,150
550- 600	1,662	27,962	2,287	19,437
600- 650	1,575	29,537	2,375	21,812
650- 700	1,512	31,050	2,437	24,250
700- 750	1,375	32,425	2,575	26,825
750- 800	1,275	33,700	2,675	29,500
800- 850	1,412	35,112	2,537	32,037
850- 900	1,837	36,950	2,112	34,150
900- 950	1,637	38,587	2,312	36,462
950-1000	1,212	39,800	2,737	39,200
1000-1050	1,237	41,037	2,712	41,912
1050-1100	1,200	42,237	2,750	44,662

TABLE 93
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,650	3,650	300	300
50- 100	3,137	6,787	813	1,112
100- 150	2,562	9,350	1,387	2,500
150- 200	2,125	11,475	1,825	4,325
200- 250	1,950	13,425	2,000	6,325
250- 300	1,975	15,400	1,975	8,300
300- 350	2,050	17,450	1,900	10,200
350- 400	2,200	19,650	1,750	11,950
400- 450	2,350	22,000	1,600	13,550
450- 500	2,437	24,437	1,512	15,062
500- 550	2,300	26,737	1,650	16,712
550- 600	1,912	28,650	2,037	18,750
600- 650	1,612	30,262	2,337	21,087
650- 700	1,387	31,650	2,562	23,650
700- 750	1,175	32,825	2,775	26,425
750- 800	1,150	33,975	2,800	29,225
800- 850	1,375	35,350	2,575	31,800
850- 900	1,850	37,200	2,100	33,900
900- 950	1,575	38,775	2,375	36,275
950-1000	1,000	39,775	2,950	39,225
1000-1050	1,025	40,800	2,925	42,150
1050-1100	1,075	41,875	2,875	45,025

TABLE 94
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,625	3,625	325	325
50- 100	3,162	6,787	787	1,112
100- 150	2,625	9,412	1,325	2,437
150- 200	2,237	11,650	1,712	4,150
200- 250	2,150	13,800	1,800	5,950
250- 300	2,175	15,975	1,775	7,725
300- 350	2,225	18,200	1,725	9,450
350- 400	2,275	20,475	1,675	11,125
400- 450	2,337	22,812	1,612	12,737
450- 500	2,412	25,225	1,537	14,275
500- 550	2,325	27,550	1,625	15,900
550- 600	1,937	29,487	2,012	17,912
600- 650	1,612	31,100	2,337	20,250
650- 700	1,550	32,650	2,400	22,650
700- 750	1,425	34,075	2,525	25,175
750- 800	1,262	35,337	2,687	27,862
800- 850	1,400	36,737	2,550	30,412
850- 900	1,862	38,600	2,087	32,500
900- 950	1,587	40,187	2,362	34,862
950-1000	1,062	41,250	2,887	37,750
1000-1050	1,125	42,375	2,825	40,575
1050-1100	1,162	43,537	2,787	43,362

TABLE 95
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,587	3,587	362	362
50- 100	3,175	6,762	775	1,137
100- 150	2,775	9,537	1,175	2,312
150- 200	2,412	11,950	1,537	3,850
200- 250	2,225	14,175	1,725	5,575
250- 300	2,188	16,362	1,762	7,337
300- 350	2,250	18,612	1,700	9,037
350- 400	2,312	20,925	1,637	10,675
400- 450	2,387	23,312	1,563	12,237
450- 500	2,475	25,787	1,475	13,712
500- 550	2,275	28,062	1,675	15,387
550- 600	1,850	29,912	2,100	17,487
600- 650	1,563	31,475	2,387	19,875
650- 700	1,400	32,875	2,550	22,425
700- 750	1,300	34,175	2,650	25,075
750- 800	1,212	35,387	2,737	27,812
800- 850	1,350	36,737	2,600	30,412
850- 900	1,825	38,562	2,125	32,537
900- 950	1,575	40,137	2,375	34,912
950-1000	1,050	41,187	2,900	37,812
1000-1050	1,087	42,275	2,862	40,675
1050-1100	1,100	43,375	2,850	43,525

TABLE 96
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=5+00A
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,875	3,875	75	75
50- 100	3,700	7,575	250	325
100- 150	3,438	11,012	512	837
150- 200	3,100	14,112	850	1,687
200- 250	2,925	17,037	1,025	2,712
250- 300	2,937	19,975	1,012	3,725
300- 350	2,937	22,912	1,012	4,737
350- 400	2,887	25,800	1,062	5,800
400- 450	2,813	28,612	1,137	6,937
450- 500	2,687	31,300	1,262	8,200
500- 550	2,437	33,737	1,512	9,712
550- 600	2,125	35,862	1,825	11,537
600- 650	1,837	37,700	2,112	13,650
650- 700	1,587	39,287	2,362	16,012
700- 750	1,450	40,737	2,500	18,512
750- 800	1,387	42,125	2,562	21,075
800- 850	1,800	43,925	2,150	23,225

TABLE 97
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=5+00A
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,850	3,850	100	100
50- 100	3,412	7,262	537	637
100- 150	2,962	10,225	987	1,625
150- 200	2,850	13,075	1,100	2,725
200- 250	2,850	15,925	1,100	3,825
250- 300	2,837	18,762	1,112	4,937
300- 350	2,800	21,562	1,150	6,087
350- 400	2,737	24,300	1,212	7,300
400- 450	2,637	26,937	1,312	8,612
450- 500	2,387	29,325	1,563	10,175
500- 550	2,075	31,400	1,875	12,050
550- 600	1,850	33,250	2,100	14,150
600- 650	1,587	34,837	2,362	16,512
650- 700	1,375	36,212	2,575	19,087
700- 750	1,287	37,500	2,662	21,750
750- 800	1,262	38,762	2,687	24,437
800- 850	1,737	40,500	2,212	26,650

TABLE 98
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=5+00A
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,875	3,875	75	75
50- 100	3,687	7,562	262	337
100- 150	3,400	10,962	550	887
150- 200	3,075	14,037	875	1,762
200- 250	2,912	16,950	1,037	2,800
250- 300	2,925	19,875	1,025	3,825
300- 350	2,887	22,762	1,062	4,887
350- 400	2,762	25,525	1,187	6,075
400- 450	2,675	28,200	1,275	7,350
450- 500	2,475	30,675	1,475	8,825
500- 550	2,212	32,887	1,737	10,562
550- 600	1,987	34,875	1,962	12,525
600- 650	1,650	36,525	2,300	14,825
650- 700	1,400	37,925	2,550	17,375
700- 750	1,200	39,125	2,750	20,125
750- 800	1,050	40,175	2,900	23,025
800- 850	1,637	41,812	2,312	25,337

TABLE 99
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=5+00A
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,862	3,862	88	88
50- 100	3,662	7,525	287	375
100- 150	3,350	10,875	600	975
150- 200	2,950	13,825	1,000	1,975
200- 250	2,750	16,575	1,200	3,175
250- 300	2,775	19,350	1,175	4,350
300- 350	2,787	22,137	1,162	5,512
350- 400	2,762	24,900	1,187	6,700
400- 450	2,737	27,637	1,212	7,912
450- 500	2,612	30,250	1,337	9,250
500- 550	2,337	32,587	1,612	10,862
550- 600	2,100	34,687	1,850	12,712
600- 650	1,825	36,512	2,125	14,837
650- 700	1,525	38,037	2,425	17,262
700- 750	1,287	39,325	2,662	19,925
750- 800	1,100	40,425	2,850	22,775
800- 850	1,675	42,100	2,275	25,050

TABLE 100
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=7+00C
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,525	3,525	425	425
50- 100	3,162	6,687	787	1,212
100- 150	2,850	9,537	1,100	2,312
150- 200	2,600	12,137	1,350	3,662
200- 250	2,312	14,450	1,637	5,300
250- 300	1,937	16,387	2,012	7,312
300- 350	1,587	17,975	2,362	9,675
350- 400	1,500	19,475	2,450	12,125
400- 450	1,487	20,962	2,462	14,587

TABLE 101
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81

DIKE NUMBER=103.2L

BOTTOM DATUM = 290

RANGE NUMBER=7+00C

TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,512	3,512	438	438
50- 100	3,112	6,625	837	1,275
100- 150	2,750	9,375	1,200	2,475
150- 200	2,512	11,887	1,437	3,912
200- 250	2,137	14,025	1,812	5,725
250- 300	1,737	15,762	2,212	7,937
300- 350	1,537	17,300	2,412	10,350
350- 400	1,500	18,800	2,450	12,800
400- 450	1,462	20,262	2,487	15,287

TABLE 102
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=7+00C
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,512	3,512	438	438
50- 100	3,000	6,512	950	1,387
100- 150	2,662	9,175	1,287	2,675
150- 200	2,537	11,712	1,412	4,087
200- 250	2,150	13,862	1,800	5,887
250- 300	1,750	15,612	2,200	8,087
300- 350	1,575	17,188	2,375	10,462
350- 400	1,525	18,712	2,425	12,887
400- 450	1,350	20,062	2,600	15,487

TABLE 103
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=7+00C
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,400	3,400	550	550
50- 100	2,925	6,325	1,025	1,575
100- 150	2,687	9,012	1,262	2,837
150- 200	2,512	11,525	1,437	4,275
200- 250	2,137	13,662	1,812	6,087
250- 300	1,737	15,400	2,212	8,300
300- 350	1,550	16,950	2,400	10,700
350- 400	1,475	18,425	2,475	13,175
400- 450	1,300	19,725	2,650	15,825

TABLE 104
AGGRADATION AND/OR DEGRADATION

DATE=5-31-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00C
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,400	3,400	550	550
50- 100	3,187	6,587	762	1,312
100- 150	2,962	9,550	987	2,300
150- 200	2,712	12,262	1,237	3,537
200- 250	2,537	14,800	1,412	4,950
250- 300	2,275	17,075	1,675	6,625
300- 350	2,212	19,287	1,737	8,362

TABLE 105
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00C
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,400	3,400	550	550
50- 100	3,175	6,575	775	1,325
100- 150	3,000	9,575	950	2,275
150- 200	2,813	12,387	1,137	3,412
200- 250	2,500	14,887	1,450	4,862
250- 300	2,162	17,050	1,787	6,650
300- 350	1,912	18,962	2,037	8,687
350- 400	1,812	20,775	2,137	10,825

TABLE 106
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00C
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,400	3,400	550	550
50- 100	3,175	6,575	775	1,325
100- 150	2,887	9,462	1,062	2,387
150- 200	2,650	12,112	1,300	3,687
200- 250	2,475	14,587	1,475	5,162
250- 300	2,212	16,800	1,737	6,900
300- 350	1,975	18,775	1,975	8,875
350- 400	1,875	20,650	2,075	10,950

TABLE 107
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=103.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00C
TOP DATUM = 369

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,350	3,350	600	600
50- 100	3,012	6,362	938	1,537
100- 150	2,775	9,137	1,175	2,712
150- 200	2,662	11,800	1,287	4,000
200- 250	2,525	14,325	1,425	5,425
250- 300	2,225	16,550	1,725	7,150
300- 350	1,925	18,475	2,025	9,175
350- 400	1,850	20,325	2,100	11,275

TABLE 108
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,800	3,800	50	50
50- 100	3,675	7,475	175	225
100- 150	3,512	10,987	337	563
150- 200	3,337	14,325	512	1,075
200- 250	3,137	17,462	712	1,787
250- 300	2,975	20,437	875	2,662
300- 350	2,875	23,312	975	3,637
350- 400	2,637	25,950	1,212	4,850
400- 450	2,425	28,375	1,425	6,275
450- 500	2,275	30,650	1,575	7,850
500- 550	1,775	32,425	2,075	9,925
550- 600	1,200	33,625	2,650	12,575
600- 650	1,262	34,887	2,587	15,162
650- 700	1,837	36,725	2,012	17,175
700- 750	2,125	38,850	1,725	18,900
750- 800	2,037	40,887	1,812	20,712
800- 850	1,950	42,837	1,900	22,612
850- 900	1,862	44,700	1,987	24,600
900- 950	1,800	46,500	2,050	26,650
950-1000	1,787	48,287	2,062	28,712
1000-1050	1,737	50,025	2,112	30,825
1050-1100	1,700	51,725	2,150	32,975
1100-1150	1,725	53,450	2,125	35,100
1150-1200	1,537	54,987	2,312	37,412

TABLE 109
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	100	100
50- 100	3,550	7,300	300	400
100- 150	3,275	10,575	575	975
150- 200	3,050	13,625	800	1,775
200- 250	2,987	16,612	862	2,637
250- 300	2,937	19,550	912	3,550
300- 350	2,800	22,350	1,050	4,600
350- 400	2,600	24,950	1,250	5,850
400- 450	2,475	27,425	1,375	7,225
450- 500	2,075	29,500	1,775	9,000
500- 550	1,250	30,750	2,600	11,600
550- 600	975	31,725	2,875	14,475
600- 650	1,375	33,100	2,475	16,950
650- 700	1,850	34,950	2,000	18,950
700- 750	2,012	36,962	1,837	20,787
750- 800	1,837	38,800	2,012	22,800
800- 850	1,675	40,475	2,175	24,975
850- 900	1,550	42,025	2,300	27,275
900- 950	1,500	43,525	2,350	29,625
950-1000	1,487	45,012	2,362	31,987
1000-1050	1,425	46,437	2,425	34,412
1050-1100	1,387	47,825	2,462	36,875
1100-1150	1,387	49,212	2,462	39,337
1150-1200	1,237	50,450	2,612	41,950

TABLE 110
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81

DIKE NUMBER=102.2L

BOTTOM DATUM = 290

RANGE NUMBER=1+00

TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	100	100
50- 100	3,537	7,287	313	412
100- 150	3,250	10,537	600	1,012
150- 200	3,037	13,575	813	1,825
200- 250	2,987	16,562	862	2,687
250- 300	2,937	19,500	912	3,600
300- 350	2,675	22,175	1,175	4,775
350- 400	2,462	24,637	1,387	6,162
400- 450	2,337	26,975	1,512	7,675
450- 500	1,650	28,625	2,200	9,875
500- 550	1,012	29,637	2,837	12,712
550- 600	1,100	30,737	2,750	15,462
600- 650	1,587	32,325	2,262	17,725
650- 700	2,000	34,325	1,850	19,575
700- 750	2,025	36,350	1,825	21,400
750- 800	1,862	38,212	1,987	23,387
800- 850	1,712	39,925	2,137	25,525
850- 900	1,637	41,562	2,212	27,737
900- 950	1,625	43,187	2,225	29,962
950-1000	1,587	44,775	2,262	32,225
1000-1050	1,512	46,287	2,337	34,562
1050-1100	1,563	47,850	2,287	36,850
1100-1150	1,612	49,462	2,237	39,087
1150-1200	1,462	50,925	2,387	41,475

TABLE 111
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	100	100
50- 100	3,537	7,287	313	412
100- 150	3,275	10,562	575	987
150- 200	3,075	13,637	775	1,762
200- 250	3,012	16,650	837	2,600
250- 300	2,950	19,600	900	3,500
300- 350	2,737	22,337	1,112	4,612
350- 400	2,575	24,912	1,275	5,887
400- 450	2,512	27,425	1,337	7,225
450- 500	1,975	29,400	1,875	9,100
500- 550	1,175	30,575	2,675	11,775
550- 600	1,075	31,650	2,775	14,550
600- 650	1,600	33,250	2,250	16,800
650- 700	2,025	35,275	1,825	18,625
700- 750	2,150	37,425	1,700	20,325
750- 800	2,037	39,462	1,812	22,137
800- 850	1,875	41,337	1,975	24,112
850- 900	1,787	43,125	2,062	26,175
900- 950	1,775	44,900	2,075	28,250
950-1000	1,762	46,662	2,087	30,337
1000-1050	1,737	48,400	2,112	32,450
1050-1100	1,850	50,250	2,000	34,450
1100-1150	1,975	52,225	1,875	36,325
1150-1200	1,650	53,875	2,200	38,525

TABLE 112
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,762	3,762	88	88
50- 100	3,700	7,462	150	237
100- 150	3,625	11,087	225	462
150- 200	3,575	14,662	275	737
200- 250	3,512	18,175	337	1,075
250- 300	3,425	21,600	425	1,500
300- 350	3,262	24,862	587	2,087
350- 400	3,050	27,912	800	2,887
400- 450	2,825	30,737	1,025	3,912
450- 500	2,400	33,137	1,450	5,362
500- 550	2,112	35,250	1,737	7,100
550- 600	2,262	37,512	1,587	8,687
600- 650	2,425	39,937	1,425	10,112
650- 700	2,500	42,437	1,350	11,462
700- 750	2,487	44,925	1,362	12,825
750- 800	2,337	47,262	1,512	14,337
800- 850	2,250	49,512	1,600	15,937
850- 900	2,212	51,725	1,637	17,575
900- 950	2,137	53,862	1,712	19,287
950-1000	2,188	56,050	1,662	20,950
1000-1050	2,237	58,287	1,612	22,562
1050-1100	2,275	60,562	1,575	24,137
1100-1150	2,400	62,962	1,450	25,587
1150-1200	2,287	65,250	1,563	27,150

TABLE 113
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,725	3,725	125	125
50- 100	3,637	7,362	212	337
100- 150	3,575	10,938	275	612
150- 200	3,525	14,462	325	938
200- 250	3,438	17,900	412	1,350
250- 300	3,287	21,187	563	1,912
300- 350	3,025	24,212	825	2,737
350- 400	2,737	26,950	1,112	3,850
400- 450	2,387	29,337	1,462	5,313
450- 500	2,125	31,462	1,725	7,037
500- 550	2,137	33,600	1,712	8,750
550- 600	2,237	35,837	1,612	10,362
600- 650	2,362	38,200	1,487	11,850
650- 700	2,375	40,575	1,475	13,325
700- 750	2,262	42,837	1,587	14,912
750- 800	2,137	44,975	1,712	16,625
800- 850	2,037	47,012	1,812	18,437
850- 900	2,012	49,025	1,837	20,275
900- 950	2,125	51,150	1,725	22,000
950-1000	2,162	53,312	1,687	23,687
1000-1050	2,188	55,500	1,662	25,350
1050-1100	2,275	57,775	1,575	26,925
1100-1150	2,087	59,862	1,762	28,687
1150-1200	1,700	61,562	2,150	30,837

TABLE 114
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,712	3,712	137	137
50- 100	3,625	7,337	225	362
100- 150	3,575	10,912	275	637
150- 200	3,525	14,437	325	962
200- 250	3,438	17,875	412	1,375
250- 300	3,287	21,162	563	1,937
300- 350	3,100	24,262	750	2,687
350- 400	2,850	27,112	1,000	3,687
400- 450	2,500	29,612	1,350	5,037
450- 500	2,237	31,850	1,612	6,650
500- 550	2,262	34,112	1,587	8,237
550- 600	2,425	36,537	1,425	9,662
600- 650	2,512	39,050	1,337	11,000
650- 700	2,412	41,462	1,437	12,437
700- 750	2,262	43,725	1,587	14,025
750- 800	2,262	45,987	1,587	15,612
800- 850	2,225	48,212	1,625	17,237
850- 900	2,125	50,337	1,725	18,962
900- 950	2,150	52,487	1,700	20,662
950-1000	2,225	54,712	1,625	22,287
1000-1050	2,287	57,000	1,563	23,850
1050-1100	2,487	59,487	1,362	25,212
1100-1150	2,600	62,087	1,250	26,462
1150-1200	2,300	64,387	1,550	28,012

TABLE 115
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,725	3,725	125	125
50- 100	3,637	7,362	212	337
100- 150	3,575	10,938	275	612
150- 200	3,512	14,450	337	950
200- 250	3,425	17,875	425	1,375
250- 300	3,287	21,162	563	1,937
300- 350	3,075	24,237	775	2,712
350- 400	2,850	27,087	1,000	3,712
400- 450	2,550	29,637	1,300	5,012
450- 500	2,250	31,887	1,600	6,612
500- 550	2,150	34,037	1,700	8,312
550- 600	2,275	36,312	1,575	9,887
600- 650	2,475	38,787	1,375	11,262
650- 700	2,450	41,237	1,400	12,662
700- 750	2,300	43,537	1,550	14,212
750- 800	2,237	45,775	1,612	15,825
800- 850	2,137	47,912	1,712	17,537
850- 900	2,075	49,987	1,775	19,312
900- 950	2,137	52,125	1,712	21,025
950-1000	2,162	54,287	1,687	22,712
1000-1050	2,325	56,612	1,525	24,237
1050-1100	2,500	59,112	1,350	25,587
1100-1150	2,450	61,562	1,400	26,987
1150-1200	2,212	63,775	1,637	28,625

TABLE 116
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81

DIKE NUMBER=102.2L

BOTTOM DATUM = 290

RANGE NUMBER=5+00B

TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,425	3,425	425	425
50- 100	3,150	6,575	700	1,125
100- 150	2,850	9,425	1,000	2,125
150- 200	2,725	12,150	1,125	3,250
200- 250	2,700	14,850	1,150	4,400
250- 300	2,675	17,525	1,175	5,575
300- 350	2,662	20,187	1,187	6,762
350- 400	2,687	22,875	1,162	7,925
400- 450	2,700	25,575	1,150	9,075
450- 500	2,637	28,212	1,212	10,287
500- 550	2,537	30,750	1,312	11,600
550- 600	2,462	33,212	1,387	12,987
600- 650	2,437	35,650	1,412	14,400
650- 700	2,500	38,150	1,350	15,750
700- 750	2,562	40,712	1,287	17,037
750- 800	2,587	43,300	1,262	18,300
800- 850	2,625	45,925	1,225	19,525
850- 900	2,650	48,575	1,200	20,725
900- 950	2,625	51,200	1,225	21,950
950-1000	2,475	53,675	1,375	23,325

TABLE 117
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81

DIKE NUMBER=102.2L

BOTTOM DATUM = 290

RANGE NUMBER=5+00B

TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,325	3,325	525	525
50- 100	2,975	6,300	875	1,400
100- 150	2,725	9,025	1,125	2,525
150- 200	2,625	11,650	1,225	3,750
200- 250	2,600	14,250	1,250	5,000
250- 300	2,575	16,825	1,275	6,275
300- 350	2,537	19,362	1,312	7,587
350- 400	2,587	21,950	1,262	8,850
400- 450	2,650	24,600	1,200	10,050
450- 500	2,587	27,187	1,262	11,312
500- 550	2,487	29,675	1,362	12,675
550- 600	2,387	32,062	1,462	14,137
600- 650	2,312	34,375	1,537	15,675
650- 700	2,337	36,712	1,512	17,188
700- 750	2,437	39,150	1,412	18,600
750- 800	2,487	41,637	1,362	19,962
800- 850	2,525	44,162	1,325	21,287
850- 900	2,562	46,725	1,287	22,575
900- 950	2,450	49,175	1,400	23,975
950-1000	2,225	51,400	1,625	25,600

TABLE 118
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=5+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,325	3,325	525	525
50- 100	2,962	6,287	887	1,412
100- 150	2,737	9,025	1,112	2,525
150- 200	2,650	11,675	1,200	3,725
200- 250	2,625	14,300	1,225	4,950
250- 300	2,600	16,900	1,250	6,200
300- 350	2,575	19,475	1,275	7,475
350- 400	2,625	22,100	1,225	8,700
400- 450	2,675	24,775	1,175	9,875
450- 500	2,662	27,437	1,187	11,062
500- 550	2,575	30,012	1,275	12,337
550- 600	2,487	32,500	1,362	13,700
600- 650	2,475	34,975	1,375	15,075
650- 700	2,525	37,500	1,325	16,400
700- 750	2,637	40,137	1,212	17,612
750- 800	2,725	42,862	1,125	18,737
800- 850	2,687	45,550	1,162	19,900
850- 900	2,525	48,075	1,325	21,225
900- 950	2,337	50,412	1,512	22,737
950-1000	2,250	52,662	1,600	24,337

TABLE 119
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=5+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,350	3,350	500	500
50- 100	3,025	6,375	825	1,325
100- 150	2,775	9,150	1,075	2,400
150- 200	2,675	11,825	1,175	3,575
200- 250	2,650	14,475	1,200	4,775
250- 300	2,600	17,075	1,250	6,025
300- 350	2,550	19,625	1,300	7,325
350- 400	2,600	22,225	1,250	8,575
400- 450	2,700	24,925	1,150	9,725
450- 500	2,787	27,712	1,062	10,787
500- 550	2,787	30,500	1,062	11,850
550- 600	2,650	33,150	1,200	13,050
600- 650	2,500	35,650	1,350	14,400
650- 700	2,512	38,162	1,337	15,737
700- 750	2,587	40,750	1,262	17,000
750- 800	2,600	43,350	1,250	18,250
800- 850	2,625	45,975	1,225	19,475
850- 900	2,575	48,550	1,275	20,750
900- 950	2,400	50,950	1,450	22,200
950-1000	2,200	53,150	1,650	23,850

TABLE 120
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=7+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,425	3,425	425	425
50- 100	3,250	6,675	600	1,025
100- 150	3,037	9,712	813	1,837
150- 200	2,937	12,650	912	2,750
200- 250	2,875	15,525	975	3,725
250- 300	2,762	18,287	1,087	4,812
300- 350	2,712	21,000	1,137	5,950
350- 400	2,700	23,700	1,150	7,100
400- 450	2,700	26,400	1,150	8,250
450- 500	2,675	29,075	1,175	9,425
500- 550	2,650	31,725	1,200	10,625
550- 600	2,662	34,387	1,187	11,812
600- 650	2,687	37,075	1,162	12,975
650- 700	2,675	39,750	1,175	14,150
700- 750	2,675	42,425	1,175	15,325
750- 800	2,675	45,100	1,175	16,500
800- 850	2,662	47,762	1,187	17,687
850- 900	2,637	50,400	1,212	18,900
900- 950	2,550	52,950	1,300	20,200
950-1000	2,525	55,475	1,325	21,525
1000-1050	2,500	57,975	1,350	22,875

TABLE 121
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=7+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,438	3,438	412	412
50- 100	3,162	6,600	688	1,100
100- 150	2,937	9,537	912	2,012
150- 200	2,887	12,425	962	2,975
200- 250	2,800	15,225	1,050	4,025
250- 300	2,725	17,950	1,125	5,150
300- 350	2,700	20,650	1,150	6,300
350- 400	2,687	23,337	1,162	7,462
400- 450	2,662	26,000	1,187	8,650
450- 500	2,637	28,637	1,212	9,862
500- 550	2,625	31,262	1,225	11,087
550- 600	2,637	33,900	1,212	12,300
600- 650	2,637	36,537	1,212	13,512
650- 700	2,637	39,175	1,212	14,725
700- 750	2,650	41,825	1,200	15,925
750- 800	2,650	44,475	1,200	17,125
800- 850	2,625	47,100	1,225	18,350
850- 900	2,575	49,675	1,275	19,625
900- 950	2,550	52,225	1,300	20,925
950-1000	2,512	54,737	1,337	22,262
1000-1050	2,387	57,125	1,462	23,725

TABLE 122
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=7+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,425	3,425	425	425
50- 100	3,137	6,563	712	1,137
100- 150	2,937	9,500	912	2,050
150- 200	2,875	12,375	975	3,025
200- 250	2,787	15,162	1,062	4,087
250- 300	2,737	17,900	1,112	5,200
300- 350	2,687	20,587	1,162	6,362
350- 400	2,687	23,275	1,162	7,525
400- 450	2,687	25,962	1,162	8,687
450- 500	2,675	28,637	1,175	9,862
500- 550	2,700	31,337	1,150	11,012
550- 600	2,737	34,075	1,112	12,125
600- 650	2,725	36,800	1,125	13,250
650- 700	2,687	39,487	1,162	14,412
700- 750	2,687	42,175	1,162	15,575
750- 800	2,712	44,887	1,137	16,712
800- 850	2,712	47,600	1,137	17,850
850- 900	2,675	50,275	1,175	19,025
900- 950	2,575	52,850	1,275	20,300
950-1000	2,425	55,275	1,425	21,725
1000-1050	2,350	57,625	1,500	23,225

TABLE 123
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=7+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,425	3,425	425	425
50- 100	3,150	6,575	700	1,125
100- 150	2,937	9,512	912	2,037
150- 200	2,887	12,400	962	3,000
200- 250	2,825	15,225	1,025	4,025
250- 300	2,800	18,025	1,050	5,075
300- 350	2,800	20,825	1,050	6,125
350- 400	2,800	23,625	1,050	7,175
400- 450	2,800	26,425	1,050	8,225
450- 500	2,800	29,225	1,050	9,275
500- 550	2,800	32,025	1,050	10,325
550- 600	2,800	34,825	1,050	11,375
600- 650	2,800	37,625	1,050	12,425
650- 700	2,800	40,425	1,050	13,475
700- 750	2,800	43,225	1,050	14,525
750- 800	2,800	46,025	1,050	15,575
800- 850	2,800	48,825	1,050	16,625
850- 900	2,762	51,587	1,087	17,712
900- 950	2,612	54,200	1,237	18,950
950-1000	2,400	56,600	1,450	20,400
1000-1050	2,262	58,862	1,587	21,987

TABLE 124
AGGRADATION AND/OR DEGRADATION

DATE=6-1-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,625	3,625	225	225
50- 100	3,412	7,037	438	662
100- 150	3,162	10,200	688	1,350
150- 200	3,037	13,237	813	2,162
200- 250	3,012	16,250	837	3,000
250- 300	2,925	19,175	925	3,925
300- 350	2,825	22,000	1,025	4,950
350- 400	2,775	24,775	1,075	6,025
400- 450	2,750	27,525	1,100	7,125
450- 500	2,725	30,250	1,125	8,250
500- 550	2,700	32,950	1,150	9,400
550- 600	2,725	35,675	1,125	10,525
600- 650	2,775	38,450	1,075	11,600
650- 700	2,813	41,262	1,037	12,637
700- 750	2,825	44,087	1,025	13,662
750- 800	2,825	46,912	1,025	14,687
800- 850	2,800	49,712	1,050	15,737
850- 900	2,725	52,437	1,125	16,862
900- 950	2,612	55,050	1,237	18,100
950-1000	2,525	57,575	1,325	19,425
1000-1050	2,500	60,075	1,350	20,775
1050-1100	2,500	62,575	1,350	22,125
1100-1150	2,475	65,050	1,375	23,500

TABLE 125
AGGRADATION AND/OR DEGRADATION

DATE=6-17-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,575	3,575	275	275
50- 100	3,250	6,825	600	875
100- 150	3,037	9,862	813	1,687
150- 200	3,012	12,875	837	2,525
200- 250	2,925	15,800	925	3,450
250- 300	2,825	18,625	1,025	4,475
300- 350	2,787	21,412	1,062	5,537
350- 400	2,762	24,175	1,087	6,625
400- 450	2,725	26,900	1,125	7,750
450- 500	2,700	29,600	1,150	8,900
500- 550	2,725	32,325	1,125	10,025
550- 600	2,775	35,100	1,075	11,100
600- 650	2,825	37,925	1,025	12,125
650- 700	2,850	40,775	1,000	13,125
700- 750	2,825	43,600	1,025	14,150
750- 800	2,787	46,387	1,062	15,212
800- 850	2,725	49,112	1,125	16,337
850- 900	2,612	51,725	1,237	17,575
900- 950	2,525	54,250	1,325	18,900
950-1000	2,500	56,750	1,350	20,250
1000-1050	2,500	59,250	1,350	21,600
1050-1100	2,462	61,712	1,387	22,987
1100-1150	2,387	64,100	1,462	24,450

TABLE 126
AGGRADATION AND/OR DEGRADATION

DATE=9-16-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,575	3,575	275	275
50- 100	3,262	6,837	587	862
100- 150	3,025	9,862	825	1,687
150- 200	2,862	12,725	987	2,675
200- 250	2,750	15,475	1,100	3,775
250- 300	2,737	18,212	1,112	4,887
300- 350	2,712	20,925	1,137	6,025
350- 400	2,700	23,625	1,150	7,175
400- 450	2,700	26,325	1,150	8,325
450- 500	2,700	29,025	1,150	9,475
500- 550	2,750	31,775	1,100	10,575
550- 600	2,800	34,575	1,050	11,625
600- 650	2,825	37,400	1,025	12,650
650- 700	2,837	40,237	1,012	13,662
700- 750	2,813	43,050	1,037	14,700
750- 800	2,775	45,825	1,075	15,775
800- 850	2,725	48,550	1,125	16,900
850- 900	2,700	51,250	1,150	18,050
900- 950	2,687	53,937	1,162	19,212
950-1000	2,637	56,575	1,212	20,425
1000-1050	2,537	59,112	1,312	21,737
1050-1100	2,475	61,587	1,375	23,112
1100-1150	2,462	64,050	1,387	24,500

TABLE 127
AGGRADATION AND/OR DEGRADATION

DATE=10-15-81
DIKE NUMBER=102.2L
BOTTOM DATUM = 290

RANGE NUMBER=9+00B
TOP DATUM = 367

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,575	3,575	275	275
50- 100	3,262	6,837	587	862
100- 150	3,037	9,875	813	1,675
150- 200	3,000	12,875	850	2,525
200- 250	2,925	15,800	925	3,450
250- 300	2,825	18,625	1,025	4,475
300- 350	2,787	21,412	1,062	5,537
350- 400	2,787	24,200	1,062	6,600
400- 450	2,775	26,975	1,075	7,675
450- 500	2,750	29,725	1,100	8,775
500- 550	2,750	32,475	1,100	9,875
550- 600	2,775	35,250	1,075	10,950
600- 650	2,850	38,100	1,000	11,950
650- 700	2,937	41,037	912	12,862
700- 750	2,987	44,025	862	13,725
750- 800	2,975	47,000	875	14,600
800- 850	2,925	49,925	925	15,525
850- 900	2,850	52,775	1,000	16,525
900- 950	2,762	55,537	1,087	17,612
950-1000	2,600	58,137	1,250	18,862
1000-1050	2,400	60,537	1,450	20,313
1050-1100	2,275	62,812	1,575	21,887
1100-1150	2,188	65,000	1,662	23,550

TABLE 128
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=-1+76

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,562	3,562	438	438
50- 100	3,212	6,775	787	1,225
100- 150	3,025	9,800	975	2,200
150- 200	2,975	12,775	1,025	3,225
200- 250	2,925	15,700	1,075	4,300
250- 300	2,900	18,600	1,100	5,400
300- 350	2,825	21,425	1,175	6,575
350- 400	2,700	24,125	1,300	7,875
400- 450	2,550	26,675	1,450	9,325
450- 500	2,362	29,037	1,637	10,962
500- 550	2,250	31,287	1,750	12,712
550- 600	2,137	33,425	1,862	14,575
600- 650	2,075	35,500	1,925	16,500
650- 700	2,075	37,575	1,925	18,425
700- 750	2,000	39,575	2,000	20,425
750- 800	2,062	41,637	1,937	22,362
800- 850	2,175	43,812	1,825	24,187
850- 900	2,237	46,050	1,762	25,950
900- 950	2,100	48,150	1,900	27,850
950-1000	1,637	49,787	2,362	30,212
1000-1050	1,187	50,975	2,813	33,025
1050-1100	962	51,937	3,037	36,062
1100-1150	1,037	52,975	2,962	39,025
1150-1200	1,175	54,150	2,825	41,850
1200-1250	1,225	55,375	2,775	44,625
1250-1300	1,325	56,700	2,675	47,300
1300-1350	1,362	58,062	2,637	49,937

TABLE 129
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81
DIKE NUMBER=100.1R
BOTTOM DATUM = 290

RANGE NUMBER=-1+76
TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,575	3,575	425	425
50- 100	3,325	6,900	675	1,100
100- 150	3,150	10,050	850	1,950
150- 200	2,975	13,025	1,025	2,975
200- 250	2,900	15,925	1,100	4,075
250- 300	2,875	18,800	1,125	5,200
300- 350	2,750	21,550	1,250	6,450
350- 400	2,600	24,150	1,400	7,850
400- 450	2,475	26,625	1,525	9,375
450- 500	2,375	29,000	1,625	11,000
500- 550	2,300	31,300	1,700	12,700
550- 600	2,237	33,537	1,762	14,462
600- 650	2,212	35,750	1,787	16,250
650- 700	2,150	37,900	1,850	18,100
700- 750	2,150	40,050	1,850	19,950
750- 800	2,250	42,300	1,750	21,700
800- 850	2,300	44,600	1,700	23,400
850- 900	2,300	46,900	1,700	25,100
900- 950	2,200	49,100	1,800	26,900
950-1000	1,700	50,800	2,300	29,200
1000-1050	1,225	52,025	2,775	31,975
1050-1100	1,225	53,250	2,775	34,750
1100-1150	1,300	54,550	2,700	37,450
1150-1200	1,225	55,775	2,775	40,225
1200-1250	1,175	56,950	2,825	43,050
1250-1300	1,300	58,250	2,700	45,750
1300-1350	1,375	59,625	2,625	48,375

TABLE 130
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=-1+76

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,550	3,550	450	450
50- 100	3,200	6,750	800	1,250
100- 150	3,025	9,775	975	2,225
150- 200	2,975	12,750	1,025	3,250
200- 250	2,937	15,687	1,062	4,312
250- 300	2,900	18,587	1,100	5,412
300- 350	2,825	21,412	1,175	6,587
350- 400	2,700	24,112	1,300	7,887
400- 450	2,562	26,675	1,437	9,325
450- 500	2,462	29,137	1,537	10,862
500- 550	2,387	31,525	1,612	12,475
550- 600	2,325	33,850	1,675	14,150
600- 650	2,275	36,125	1,725	15,875
650- 700	2,225	38,350	1,775	17,650
700- 750	2,250	40,600	1,750	19,400
750- 800	2,325	42,925	1,675	21,075
800- 850	2,375	45,300	1,625	22,700
850- 900	2,375	47,675	1,625	24,325
900- 950	2,050	49,725	1,950	26,275
950-1000	1,512	51,237	2,487	28,762
1000-1050	1,237	52,475	2,762	31,525
1050-1100	1,250	53,725	2,750	34,275
1100-1150	1,250	54,975	2,750	37,025
1150-1200	1,200	56,175	2,800	39,825
1200-1250	1,225	57,400	2,775	42,600
1250-1300	1,325	58,725	2,675	45,275
1300-1350	1,350	60,075	2,650	47,925

TABLE 131
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=-1+76

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,550	3,550	450	450
50- 100	3,200	6,750	800	1,250
100- 150	3,012	9,762	987	2,237
150- 200	2,962	12,725	1,037	3,275
200- 250	2,937	15,662	1,062	4,337
250- 300	2,900	18,562	1,100	5,437
300- 350	2,825	21,387	1,175	6,612
350- 400	2,775	24,162	1,225	7,837
400- 450	2,700	26,862	1,300	9,137
450- 500	2,537	29,400	1,462	10,600
500- 550	2,450	31,850	1,550	12,150
550- 600	2,425	34,275	1,575	13,725
600- 650	2,375	36,650	1,625	15,350
650- 700	2,350	39,000	1,650	17,000
700- 750	2,350	41,350	1,650	18,650
750- 800	2,375	43,725	1,625	20,275
800- 850	2,400	46,125	1,600	21,875
850- 900	2,400	48,525	1,600	23,475
900- 950	2,350	50,875	1,650	25,125
950-1000	2,037	52,912	1,962	27,087
1000-1050	1,537	54,450	2,462	29,550
1050-1100	1,337	55,787	2,662	32,212
1100-1150	1,375	57,162	2,625	34,837
1150-1200	1,450	58,612	2,550	37,387
1200-1250	1,512	60,125	2,487	39,875
1250-1300	1,512	61,637	2,487	42,362
1300-1350	1,450	63,087	2,550	44,912

TABLE 132
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=1+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,700	7,600	300	400
100- 150	3,500	11,100	500	900
150- 200	3,312	14,412	688	1,587
200- 250	3,062	17,475	938	2,525
250- 300	2,850	20,325	1,150	3,675
300- 350	2,700	23,025	1,300	4,975
350- 400	2,450	25,475	1,550	6,525
400- 450	2,200	27,675	1,800	8,325
450- 500	2,037	29,712	1,962	10,287
500- 550	1,887	31,600	2,112	12,400
550- 600	1,525	33,125	2,475	14,875
600- 650	1,150	34,275	2,850	17,725
650- 700	1,212	35,487	2,787	20,512
700- 750	1,687	37,175	2,312	22,825
750- 800	2,062	39,237	1,937	24,762
800- 850	2,125	41,362	1,875	26,637
850- 900	2,037	43,400	1,962	28,600
900- 950	1,925	45,325	2,075	30,675
950-1000	1,875	47,200	2,125	32,800
1000-1050	1,825	49,025	2,175	34,975
1050-1100	1,700	50,725	2,300	37,275
1100-1150	1,400	52,125	2,600	39,875
1150-1200	1,750	53,875	2,250	42,125
1200-1250	1,637	55,512	2,362	44,487
1250-1300	987	56,500	3,012	47,500
1300-1350	1,150	57,650	2,850	50,350

TABLE 133
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81
DIKE NUMBER=100.1R
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,775	3,775	225	225
50- 100	3,375	7,150	625	850
100- 150	3,100	10,250	900	1,750
150- 200	2,950	13,200	1,050	2,800
200- 250	2,850	16,050	1,150	3,950
250- 300	2,687	18,737	1,312	5,262
300- 350	2,450	21,187	1,550	6,812
350- 400	2,212	23,400	1,787	8,600
400- 450	2,025	25,425	1,975	10,575
450- 500	1,850	27,275	2,150	12,725
500- 550	1,600	28,875	2,400	15,125
550- 600	1,337	30,212	2,662	17,787
600- 650	1,250	31,462	2,750	20,537
650- 700	1,487	32,950	2,512	23,050
700- 750	1,975	34,925	2,025	25,075
750- 800	2,262	37,187	1,737	26,812
800- 850	2,237	39,425	1,762	28,575
850- 900	2,175	41,600	1,825	30,400
900- 950	2,100	43,700	1,900	32,300
950-1000	2,025	45,725	1,975	34,275
1000-1050	1,975	47,700	2,025	36,300
1050-1100	1,850	49,550	2,150	38,450
1100-1150	1,550	51,100	2,450	40,900
1150-1200	1,850	52,950	2,150	43,050
1200-1250	1,750	54,700	2,250	45,300
1250-1300	1,175	55,875	2,825	48,125
1300-1350	1,225	57,100	2,775	50,900

TABLE 134
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=1+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,875	3,875	125	125
50- 100	3,650	7,525	350	475
100- 150	3,450	10,975	550	1,025
150- 200	3,250	14,225	750	1,775
200- 250	3,000	17,225	1,000	2,775
250- 300	2,725	19,950	1,275	4,050
300- 350	2,500	22,450	1,500	5,550
350- 400	2,275	24,725	1,725	7,275
400- 450	2,062	26,787	1,937	9,212
450- 500	1,850	28,637	2,150	11,362
500- 550	1,587	30,225	2,412	13,775
550- 600	1,175	31,400	2,825	16,600
600- 650	800	32,200	3,200	19,800
650- 700	1,225	33,425	2,775	22,575
700- 750	2,100	35,525	1,900	24,475
750- 800	2,375	37,900	1,625	26,100
800- 850	2,250	40,150	1,750	27,850
850- 900	2,188	42,337	1,812	29,662
900- 950	2,162	44,500	1,837	31,500
950-1000	2,125	46,625	1,875	33,375
1000-1050	2,075	48,700	1,925	35,300
1050-1100	1,900	50,600	2,100	37,400
1100-1150	1,687	52,287	2,312	39,712
1150-1200	1,962	54,250	2,037	41,750
1200-1250	1,600	55,850	2,400	44,150
1250-1300	1,025	56,875	2,975	47,125
1300-1350	1,225	58,100	2,775	49,900

TABLE 135
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=1+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,700	7,600	300	400
100- 150	3,487	11,087	512	912
150- 200	3,262	14,350	737	1,650
200- 250	3,025	17,375	975	2,625
250- 300	2,825	20,200	1,175	3,800
300- 350	2,612	22,812	1,387	5,187
350- 400	2,350	25,162	1,650	6,837
400- 450	2,137	27,300	1,862	8,700
450- 500	1,962	29,262	2,037	10,737
500- 550	1,737	31,000	2,262	13,000
550- 600	1,450	32,450	2,550	15,550
600- 650	1,150	33,600	2,850	18,400
650- 700	1,137	34,737	2,862	21,262
700- 750	1,887	36,625	2,112	23,375
750- 800	2,375	39,000	1,625	25,000
800- 850	2,225	41,225	1,775	26,775
850- 900	2,200	43,425	1,800	28,575
900- 950	2,188	45,612	1,812	30,387
950-1000	2,125	47,737	1,875	32,262
1000-1050	2,062	49,800	1,937	34,200
1050-1100	1,775	51,575	2,225	36,425
1100-1150	1,462	53,037	2,537	38,962
1150-1200	1,875	54,912	2,125	41,087
1200-1250	1,612	56,525	2,387	43,475
1250-1300	1,000	57,525	3,000	46,475
1300-1350	1,262	58,787	2,737	49,212

TABLE 136
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81
DIKE NUMBER=100.1R
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	250	250
50- 100	3,575	7,325	425	675
100- 150	3,425	10,750	575	1,250
150- 200	3,300	14,050	700	1,950
200- 250	3,175	17,225	825	2,775
250- 300	3,037	20,262	962	3,737
300- 350	2,862	23,125	1,137	4,875
350- 400	2,675	25,800	1,325	6,200
400- 450	2,512	28,312	1,487	7,687
450- 500	2,312	30,625	1,687	9,375
500- 550	2,050	32,675	1,950	11,325
550- 600	1,825	34,500	2,175	13,500
600- 650	1,750	36,250	2,250	15,750
650- 700	1,825	38,075	2,175	17,925
700- 750	2,075	40,150	1,925	19,850
750- 800	2,375	42,525	1,625	21,475
800- 850	2,525	45,050	1,475	22,950
850- 900	2,500	47,550	1,500	24,450
900- 950	2,412	49,962	1,587	26,037
950-1000	2,387	52,350	1,612	27,650
1000-1050	2,350	54,700	1,650	29,300
1050-1100	2,075	56,775	1,925	31,225
1100-1150	1,625	58,400	2,375	33,600

TABLE 137
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=3+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	250	250
50- 100	3,550	7,300	450	700
100- 150	3,400	10,700	600	1,300
150- 200	3,300	14,000	700	2,000
200- 250	3,175	17,175	825	2,825
250- 300	3,025	20,200	975	3,800
300- 350	2,825	23,025	1,175	4,975
350- 400	2,625	25,650	1,375	6,350
400- 450	2,475	28,125	1,525	7,875
450- 500	2,300	30,425	1,700	9,575
500- 550	2,075	32,500	1,925	11,500
550- 600	1,825	34,325	2,175	13,675
600- 650	1,700	36,025	2,300	15,975
650- 700	1,850	37,875	2,150	18,125
700- 750	2,125	40,000	1,875	20,000
750- 800	2,362	42,362	1,637	21,637
800- 850	2,512	44,875	1,487	23,125
850- 900	2,537	47,412	1,462	24,587
900- 950	2,487	49,900	1,512	26,100
950-1000	2,425	52,325	1,575	27,675
1000-1050	2,412	54,737	1,587	29,262
1050-1100	2,237	56,975	1,762	31,025
1100-1150	1,800	58,775	2,200	33,225

TABLE 138
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81
DIKE NUMBER=100.1R
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,762	3,762	237	237
50- 100	3,562	7,325	438	675
100- 150	3,425	10,750	575	1,250
150- 200	3,387	14,137	612	1,862
200- 250	3,337	17,475	662	2,525
250- 300	3,250	20,725	750	3,275
300- 350	3,125	23,850	875	4,150
350- 400	2,950	26,800	1,050	5,200
400- 450	2,675	29,475	1,325	6,525
450- 500	2,350	31,825	1,650	8,175
500- 550	2,075	33,900	1,925	10,100
550- 600	1,825	35,725	2,175	12,275
600- 650	1,725	37,450	2,275	14,550
650- 700	1,875	39,325	2,125	16,675
700- 750	2,200	41,525	1,800	18,475
750- 800	2,537	44,062	1,462	19,937
800- 850	2,687	46,750	1,312	21,250
850- 900	2,625	49,375	1,375	22,625
900- 950	2,500	51,875	1,500	24,125
950-1000	2,462	54,337	1,537	25,662
1000-1050	2,412	56,750	1,587	27,250
1050-1100	2,150	58,900	1,850	29,100
1100-1150	1,675	60,575	2,325	31,425

TABLE 139
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81
DIKE NUMBER=100.1R
BOTTOM DATUM = 290

RANGE NUMBER=3+00
TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,750	3,750	250	250
50- 100	3,562	7,312	438	688
100- 150	3,438	10,750	563	1,250
150- 200	3,387	14,137	612	1,862
200- 250	3,350	17,487	650	2,512
250- 300	3,262	20,750	737	3,250
300- 350	3,125	23,875	875	4,125
350- 400	2,925	26,800	1,075	5,200
400- 450	2,625	29,425	1,375	6,575
450- 500	2,275	31,700	1,725	8,300
500- 550	1,987	33,687	2,012	10,312
550- 600	1,800	35,487	2,200	12,512
600- 650	1,787	37,275	2,212	14,725
650- 700	2,050	39,325	1,950	16,675
700- 750	2,362	41,687	1,637	18,312
750- 800	2,587	44,275	1,412	19,725
800- 850	2,712	46,987	1,287	21,012
850- 900	2,700	49,687	1,300	22,312
900- 950	2,575	52,262	1,425	23,737
950-1000	2,475	54,737	1,525	25,262
1000-1050	2,400	57,137	1,600	26,862
1050-1100	2,112	59,250	1,887	28,750
1100-1150	1,650	60,900	2,350	31,100

TABLE 140
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=5+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,625	3,625	375	375
50- 100	3,550	7,175	450	825
100- 150	3,450	10,625	550	1,375
150- 200	3,350	13,975	650	2,025
200- 250	3,225	17,200	775	2,800
250- 300	3,112	20,313	887	3,687
300- 350	3,012	23,325	987	4,675
350- 400	2,850	26,175	1,150	5,825
400- 450	2,700	28,875	1,300	7,125
450- 500	2,650	31,525	1,350	8,475
500- 550	2,675	34,200	1,325	9,800
550- 600	2,712	36,912	1,287	11,087
600- 650	2,762	39,675	1,237	12,325
650- 700	2,825	42,500	1,175	13,500
700- 750	2,900	45,400	1,100	14,600
750- 800	2,950	48,350	1,050	15,650
800- 850	2,925	51,275	1,075	16,725
850- 900	2,825	54,100	1,175	17,900
900- 950	2,625	56,725	1,375	19,275
950-1000	2,200	58,925	1,800	21,075
1000-1050	1,725	60,650	2,275	23,350
1050-1100	1,525	62,175	2,475	25,825
1100-1150	1,437	63,612	2,562	28,387

TABLE 141
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=5+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,625	3,625	375	375
50- 100	3,550	7,175	450	825
100- 150	3,462	10,637	537	1,362
150- 200	3,362	14,000	637	2,000
200- 250	3,200	17,200	800	2,800
250- 300	3,000	20,200	1,000	3,800
300- 350	2,837	23,037	1,162	4,962
350- 400	2,737	25,775	1,262	6,225
400- 450	2,675	28,450	1,325	7,550
450- 500	2,650	31,100	1,350	8,900
500- 550	2,662	33,762	1,337	10,237
550- 600	2,712	36,475	1,287	11,525
600- 650	2,800	39,275	1,200	12,725
650- 700	2,875	42,150	1,125	13,850
700- 750	2,900	45,050	1,100	14,950
750- 800	2,900	47,950	1,100	16,050
800- 850	2,862	50,812	1,137	17,188
850- 900	2,737	53,550	1,262	18,450
900- 950	2,225	55,775	1,775	20,225
950-1000	1,725	57,500	2,275	22,500
1000-1050	1,600	59,100	2,400	24,900
1050-1100	1,425	60,525	2,575	27,475
1100-1150	1,300	61,825	2,700	30,175

TABLE 142
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81
DIKE NUMBER=100.1R
BOTTOM DATUM = 290

RANGE NUMBER=5+00
TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,625	3,625	375	375
50- 100	3,550	7,175	450	825
100- 150	3,475	10,650	525	1,350
150- 200	3,400	14,050	600	1,950
200- 250	3,225	17,275	775	2,725
250- 300	3,000	20,275	1,000	3,725
300- 350	2,850	23,125	1,150	4,875
350- 400	2,750	25,875	1,250	6,125
400- 450	2,675	28,550	1,325	7,450
450- 500	2,650	31,200	1,350	8,800
500- 550	2,650	33,850	1,350	10,150
550- 600	2,700	36,550	1,300	11,450
600- 650	2,800	39,350	1,200	12,650
650- 700	2,875	42,225	1,125	13,775
700- 750	2,900	45,125	1,100	14,875
750- 800	2,900	48,025	1,100	15,975
800- 850	2,875	50,900	1,125	17,100
850- 900	2,675	53,575	1,325	18,425
900- 950	2,150	55,725	1,850	20,275
950-1000	1,725	57,450	2,275	22,550
1000-1050	1,600	59,050	2,400	24,950
1050-1100	1,425	60,475	2,575	27,525
1100-1150	1,300	61,775	2,700	30,225

TABLE 143
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=5+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,612	3,612	387	387
50- 100	3,550	7,162	450	837
100- 150	3,500	10,662	500	1,337
150- 200	3,412	14,075	587	1,925
200- 250	3,250	17,325	750	2,675
250- 300	3,025	20,350	975	3,650
300- 350	2,837	23,187	1,162	4,812
350- 400	2,737	25,925	1,262	6,075
400- 450	2,662	28,587	1,337	7,412
450- 500	2,625	31,212	1,375	8,787
500- 550	2,637	33,850	1,362	10,150
550- 600	2,687	36,537	1,312	11,462
600- 650	2,787	39,325	1,212	12,675
650- 700	2,875	42,200	1,125	13,800
700- 750	2,900	45,100	1,100	14,900
750- 800	2,900	48,000	1,100	16,000
800- 850	2,887	50,887	1,112	17,112
850- 900	2,837	53,725	1,162	18,275
900- 950	2,750	56,475	1,250	19,525
950-1000	2,475	58,950	1,525	21,050
1000-1050	2,012	60,962	1,987	23,037
1050-1100	1,762	62,725	2,237	25,275
1100-1150	1,625	64,350	2,375	27,650

TABLE 144
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=7+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,800	7,700	200	300
100- 150	3,675	11,375	325	625
150- 200	3,525	14,900	475	1,100
200- 250	3,375	18,275	625	1,725
250- 300	3,225	21,500	775	2,500
300- 350	3,150	24,650	850	3,350
350- 400	3,125	27,775	875	4,225
400- 450	3,050	30,825	950	5,175
450- 500	2,975	33,800	1,025	6,200
500- 550	2,937	36,737	1,062	7,262
550- 600	2,875	39,612	1,125	8,387
600- 650	2,775	42,387	1,225	9,612
650- 700	2,787	45,175	1,212	10,825
700- 750	2,887	48,062	1,112	11,937
750- 800	2,987	51,050	1,012	12,950
800- 850	3,075	54,125	925	13,875
850- 900	3,112	57,237	887	14,762
900- 950	3,087	60,325	912	15,675
950-1000	2,875	63,200	1,125	16,800
1000-1050	2,475	65,675	1,525	18,325
1050-1100	2,050	67,725	1,950	20,275
1100-1150	1,800	69,525	2,200	22,475

TABLE 145
AGGRADATION AND/OR DEGRADATION

DATE=6-19-81
DIKE NUMBER=100.1R
BOTTOM DATUM = 290

RANGE NUMBER=7+00
TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,787	7,687	212	313
100- 150	3,637	11,325	362	675
150- 200	3,487	14,812	512	1,187
200- 250	3,350	18,162	650	1,837
250- 300	3,200	21,362	800	2,637
300- 350	3,050	24,412	950	3,587
350- 400	2,937	27,350	1,062	4,650
400- 450	2,887	30,237	1,112	5,762
450- 500	2,875	33,112	1,125	6,887
500- 550	2,862	35,975	1,137	8,025
550- 600	2,787	38,762	1,212	9,237
600- 650	2,737	41,500	1,262	10,500
650- 700	2,825	44,325	1,175	11,675
700- 750	2,937	47,262	1,062	12,737
750- 800	2,987	50,250	1,012	13,750
800- 850	3,000	53,250	1,000	14,750
850- 900	3,000	56,250	1,000	15,750
900- 950	2,925	59,175	1,075	16,825
950-1000	2,600	61,775	1,400	18,225
1000-1050	2,175	63,950	1,825	20,050
1050-1100	1,925	65,875	2,075	22,125
1100-1150	1,825	67,700	2,175	24,300

TABLE 146
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=7+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,900	3,900	100	100
50- 100	3,787	7,687	212	313
100- 150	3,650	11,337	350	662
150- 200	3,487	14,825	512	1,175
200- 250	3,325	18,150	675	1,850
250- 300	3,175	21,325	825	2,675
300- 350	3,025	24,350	975	3,650
350- 400	2,925	27,275	1,075	4,725
400- 450	2,900	30,175	1,100	5,825
450- 500	2,900	33,075	1,100	6,925
500- 550	2,875	35,950	1,125	8,050
550- 600	2,775	38,725	1,225	9,275
600- 650	2,700	41,425	1,300	10,575
650- 700	2,775	44,200	1,225	11,800
700- 750	2,900	47,100	1,100	12,900
750- 800	2,950	50,050	1,050	13,950
800- 850	2,975	53,025	1,025	14,975
850- 900	3,000	56,025	1,000	15,975
900- 950	2,975	59,000	1,025	17,000
950-1000	2,750	61,750	1,250	18,250
1000-1050	2,600	64,350	1,400	19,650
1050-1100	2,575	66,925	1,425	21,075
1100-1150	2,450	69,375	1,550	22,625

TABLE 147
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81

DIKE NUMBER=100.1R

BOTTOM DATUM = 290

RANGE NUMBER=7+00

TOP DATUM = 370

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,925	3,925	75	75
50- 100	3,825	7,750	175	250
100- 150	3,675	11,425	325	575
150- 200	3,525	14,950	475	1,050
200- 250	3,350	18,300	650	1,700
250- 300	3,175	21,475	825	2,525
300- 350	3,025	24,500	975	3,500
350- 400	2,937	27,437	1,062	4,562
400- 450	2,912	30,350	1,087	5,650
450- 500	2,900	33,250	1,100	6,750
500- 550	2,875	36,125	1,125	7,875
550- 600	2,775	38,900	1,225	9,100
600- 650	2,712	41,612	1,287	10,387
650- 700	2,787	44,400	1,212	11,600
700- 750	2,900	47,300	1,100	12,700
750- 800	2,950	50,250	1,050	13,750
800- 850	2,962	53,212	1,037	14,787
850- 900	2,975	56,187	1,025	15,812
900- 950	2,887	59,075	1,112	16,925
950-1000	2,675	61,750	1,325	18,250
1000-1050	2,362	64,112	1,637	19,887
1050-1100	2,112	66,225	1,887	21,775
1100-1150	1,975	68,200	2,025	23,800

TABLE 148
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=-2+00A
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,175	3,175	525	525
50- 100	3,075	6,250	625	1,150
100- 150	2,925	9,175	775	1,925
150- 200	2,737	11,912	962	2,887
200- 250	2,662	14,575	1,037	3,925
250- 300	2,650	17,225	1,050	4,975
300- 350	2,650	19,875	1,050	6,025
350- 400	2,637	22,512	1,062	7,087
400- 450	2,587	25,100	1,112	8,200
450- 500	2,525	27,625	1,175	9,375
500- 550	2,500	30,125	1,200	10,575
550- 600	2,425	32,550	1,275	11,850
600- 650	2,337	34,887	1,362	13,212
650- 700	2,362	37,250	1,337	14,550
700- 750	2,425	39,675	1,275	15,825
750- 800	2,450	42,125	1,250	17,075
800- 850	2,450	44,575	1,250	18,325
850- 900	2,437	47,012	1,262	19,587
900- 950	2,412	49,425	1,287	20,875
950-1000	2,375	51,800	1,325	22,200
1000-1050	2,350	54,150	1,350	23,550
1050-1100	2,350	56,500	1,350	24,900
1100-1150	2,325	58,825	1,375	26,275
1150-1200	2,300	61,125	1,400	27,675
1200-1250	2,300	63,425	1,400	29,075
1250-1300	2,275	65,700	1,425	30,500

TABLE 149
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=-2+00A
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,137	3,137	563	563
50- 100	2,937	6,075	762	1,325
100- 150	2,800	8,875	900	2,225
150- 200	2,712	11,587	987	3,212
200- 250	2,662	14,250	1,037	4,250
250- 300	2,650	16,900	1,050	5,300
300- 350	2,637	19,537	1,062	6,362
350- 400	2,612	22,150	1,087	7,450
400- 450	2,550	24,700	1,150	8,600
450- 500	2,500	27,200	1,200	9,800
500- 550	2,500	29,700	1,200	11,000
550- 600	2,425	32,125	1,275	12,275
600- 650	2,300	34,425	1,400	13,675
650- 700	2,325	36,750	1,375	15,050
700- 750	2,400	39,150	1,300	16,350
750- 800	2,400	41,550	1,300	17,650
800- 850	2,400	43,950	1,300	18,950
850- 900	2,400	46,350	1,300	20,250
900- 950	2,400	48,750	1,300	21,550
950-1000	2,387	51,137	1,312	22,862
1000-1050	2,375	53,512	1,325	24,187
1050-1100	2,362	55,875	1,337	25,525
1100-1150	2,325	58,200	1,375	26,900
1150-1200	2,275	60,475	1,425	28,325
1200-1250	2,275	62,750	1,425	29,750
1250-1300	2,275	65,025	1,425	31,175

TABLE 150
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=-2+00A
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,200	3,200	500	500
50- 100	3,100	6,300	600	1,100
100- 150	2,900	9,200	800	1,900
150- 200	2,675	11,875	1,025	2,925
200- 250	2,575	14,450	1,125	4,050
250- 300	2,550	17,000	1,150	5,200
300- 350	2,550	19,550	1,150	6,350
350- 400	2,525	22,075	1,175	7,525
400- 450	2,475	24,550	1,225	8,750
450- 500	2,450	27,000	1,250	10,000
500- 550	2,450	29,450	1,250	11,250
550- 600	2,400	31,850	1,300	12,550
600- 650	2,300	34,150	1,400	13,950
650- 700	2,250	36,400	1,450	15,400
700- 750	2,287	38,687	1,412	16,812
750- 800	2,337	41,025	1,362	18,175
800- 850	2,325	43,350	1,375	19,550
850- 900	2,300	45,650	1,400	20,950
900- 950	2,300	47,950	1,400	22,350
950-1000	2,300	50,250	1,400	23,750
1000-1050	2,300	52,550	1,400	25,150
1050-1100	2,300	54,850	1,400	26,550
1100-1150	2,275	57,125	1,425	27,975
1150-1200	2,225	59,350	1,475	29,450
1200-1250	2,125	61,475	1,575	31,025
1250-1300	2,025	63,500	1,675	32,700

TABLE 151
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=-2+00A
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,212	3,212	487	487
50- 100	3,137	6,350	563	1,050
100- 150	2,975	9,325	725	1,775
150- 200	2,787	12,112	912	2,687
200- 250	2,712	14,825	987	3,675
250- 300	2,700	17,525	1,000	4,675
300- 350	2,700	20,225	1,000	5,675
350- 400	2,700	22,925	1,000	6,675
400- 450	2,675	25,600	1,025	7,700
450- 500	2,600	28,200	1,100	8,800
500- 550	2,550	30,750	1,150	9,950
550- 600	2,475	33,225	1,225	11,175
600- 650	2,375	35,600	1,325	12,500
650- 700	2,437	38,037	1,262	13,762
700- 750	2,537	40,575	1,162	14,925
750- 800	2,550	43,125	1,150	16,075
800- 850	2,537	45,662	1,162	17,237
850- 900	2,512	48,175	1,187	18,425
900- 950	2,500	50,675	1,200	19,625
950-1000	2,475	53,150	1,225	20,850
1000-1050	2,450	55,600	1,250	22,100
1050-1100	2,425	58,025	1,275	23,375
1100-1150	2,400	60,425	1,300	24,675
1150-1200	2,375	62,800	1,325	26,000
1200-1250	2,325	65,125	1,375	27,375
1250-1300	2,250	67,375	1,450	28,825

TABLE 152
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,475	3,475	225	225
50- 100	3,325	6,800	375	600
100- 150	3,100	9,900	600	1,200
150- 200	2,650	12,550	1,050	2,250
200- 250	2,212	14,762	1,487	3,737
250- 300	2,125	16,887	1,575	5,313
300- 350	2,188	19,075	1,512	6,825
350- 400	2,175	21,250	1,525	8,350
400- 450	2,112	23,362	1,587	9,937
450- 500	2,037	25,400	1,662	11,600
500- 550	1,975	27,375	1,725	13,325
550- 600	1,900	29,275	1,800	15,125
600- 650	1,775	31,050	1,925	17,050
650- 700	1,712	32,762	1,987	19,037
700- 750	1,612	34,375	2,087	21,125
750- 800	1,412	35,787	2,287	23,412
800- 850	1,312	37,100	2,387	25,800
850- 900	1,225	38,325	2,475	28,275
900- 950	1,062	39,387	2,637	30,912
950-1000	862	40,250	2,837	33,750
1000-1050	975	41,225	2,725	36,475
1050-1100	1,375	42,600	2,325	38,800
1100-1150	1,875	44,475	1,825	40,625
1150-1200	2,200	46,675	1,500	42,125
1200-1250	2,200	48,875	1,500	43,625
1250-1300	2,150	51,025	1,550	45,175
1300-1350	1,700	52,725	2,000	47,175

TABLE 153
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,475	3,475	225	225
50- 100	3,275	6,750	425	650
100- 150	2,875	9,625	825	1,475
150- 200	2,375	12,000	1,325	2,800
200- 250	2,175	14,175	1,525	4,325
250- 300	2,200	16,375	1,500	5,825
300- 350	2,188	18,562	1,512	7,337
350- 400	2,162	20,725	1,537	8,875
400- 450	2,075	22,800	1,625	10,500
450- 500	2,000	24,800	1,700	12,200
500- 550	1,975	26,775	1,725	13,925
550- 600	1,900	28,675	1,800	15,725
600- 650	1,787	30,462	1,912	17,637
650- 700	1,700	32,162	2,000	19,637
700- 750	1,563	33,725	2,137	21,775
750- 800	1,412	35,137	2,287	24,062
800- 850	1,362	36,500	2,337	26,400
850- 900	1,175	37,675	2,525	28,925
900- 950	900	38,575	2,800	31,725
950-1000	825	39,400	2,875	34,600
1000-1050	1,000	40,400	2,700	37,300
1050-1100	1,625	42,025	2,075	39,375
1100-1150	2,150	44,175	1,550	40,925
1150-1200	2,225	46,400	1,475	42,400
1200-1250	2,200	48,600	1,500	43,900
1250-1300	2,000	50,600	1,700	45,600
1300-1350	1,712	52,312	1,987	47,587

TABLE 154
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,500	3,500	200	200
50- 100	3,350	6,850	350	550
100- 150	2,950	9,800	750	1,300
150- 200	2,375	12,175	1,325	2,625
200- 250	2,075	14,250	1,625	4,250
250- 300	2,100	16,350	1,600	5,850
300- 350	2,100	18,450	1,600	7,450
350- 400	2,037	20,487	1,662	9,112
400- 450	1,937	22,425	1,762	10,875
450- 500	1,875	24,300	1,825	12,700
500- 550	1,850	26,150	1,850	14,550
550- 600	1,725	27,875	1,975	16,525
600- 650	1,625	29,500	2,075	18,600
650- 700	1,550	31,050	2,150	20,750
700- 750	1,387	32,437	2,312	23,062
750- 800	1,262	33,700	2,437	25,500
800- 850	1,025	34,725	2,675	28,175
850- 900	725	35,450	2,975	31,150
900- 950	625	36,075	3,075	34,225
950-1000	775	36,850	2,925	37,150
1000-1050	950	37,800	2,750	39,900
1050-1100	1,275	39,075	2,425	42,325
1100-1150	1,725	40,800	1,975	44,300
1150-1200	1,850	42,650	1,850	46,150
1200-1250	1,900	44,550	1,800	47,950
1250-1300	1,900	46,450	1,800	49,750
1300-1350	1,825	48,275	1,875	51,625

TABLE 155
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=1+00
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,500	3,500	200	200
50- 100	3,325	6,825	375	575
100- 150	3,000	9,825	700	1,275
150- 200	2,575	12,400	1,125	2,400
200- 250	2,337	14,737	1,362	3,762
250- 300	2,312	17,050	1,387	5,150
300- 350	2,225	19,275	1,475	6,625
350- 400	2,175	21,450	1,525	8,150
400- 450	2,150	23,600	1,550	9,700
450- 500	2,075	25,675	1,625	11,325
500- 550	2,050	27,725	1,650	12,975
550- 600	1,975	29,700	1,725	14,700
600- 650	1,825	31,525	1,875	16,575
650- 700	1,725	33,250	1,975	18,550
700- 750	1,700	34,950	2,000	20,550
750- 800	1,600	36,550	2,100	22,650
800- 850	1,525	38,075	2,175	24,825
850- 900	1,325	39,400	2,375	27,200
900- 950	1,000	40,400	2,700	29,900
950-1000	1,000	41,400	2,700	32,600
1000-1050	1,200	42,600	2,500	35,100
1050-1100	1,400	44,000	2,300	37,400
1100-1150	1,775	45,775	1,925	39,325
1150-1200	2,050	47,825	1,650	40,975
1200-1250	2,050	49,875	1,650	42,625
1250-1300	2,100	51,975	1,600	44,225
1300-1350	2,125	54,100	1,575	45,800

TABLE 156
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=3+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,537	3,537	162	162
50- 100	3,112	6,650	587	750
100- 150	2,712	9,362	987	1,737
150- 200	2,462	11,825	1,237	2,975
200- 250	2,350	14,175	1,350	4,325
250- 300	2,275	16,450	1,425	5,750
300- 350	2,112	18,562	1,587	7,337
350- 400	1,987	20,550	1,712	9,050
400- 450	2,075	22,625	1,625	10,675
450- 500	2,225	24,850	1,475	12,150
500- 550	2,225	27,075	1,475	13,625
550- 600	2,175	29,250	1,525	15,150
600- 650	2,150	31,400	1,550	16,700
650- 700	2,175	33,575	1,525	18,225
700- 750	2,200	35,775	1,500	19,725
750- 800	2,225	38,000	1,475	21,200
800- 850	2,200	40,200	1,500	22,700
850- 900	2,050	42,250	1,650	24,350
900- 950	1,850	44,100	1,850	26,200
950-1000	1,750	45,850	1,950	28,150
1000-1050	1,800	47,650	1,900	30,050
1050-1100	1,875	49,525	1,825	31,875
1100-1150	1,862	51,387	1,837	33,712
1150-1200	1,837	53,225	1,862	35,575
1200-1250	1,975	55,200	1,725	37,300
1250-1300	2,150	57,350	1,550	38,850

TABLE 157
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=3+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,425	3,425	275	275
50- 100	2,925	6,350	775	1,050
100- 150	2,575	8,925	1,125	2,175
150- 200	2,400	11,325	1,300	3,475
200- 250	2,325	13,650	1,375	4,850
250- 300	2,225	15,875	1,475	6,325
300- 350	2,075	17,950	1,625	7,950
350- 400	2,000	19,950	1,700	9,650
400- 450	2,125	22,075	1,575	11,225
450- 500	2,250	24,325	1,450	12,675
500- 550	2,200	26,525	1,500	14,175
550- 600	2,125	28,650	1,575	15,750
600- 650	2,100	30,750	1,600	17,350
650- 700	2,125	32,875	1,575	18,925
700- 750	2,150	35,025	1,550	20,475
750- 800	2,175	37,200	1,525	22,000
800- 850	2,125	39,325	1,575	23,575
850- 900	1,950	41,275	1,750	25,325
900- 950	1,775	43,050	1,925	27,250
950-1000	1,675	44,725	2,025	29,275
1000-1050	1,750	46,475	1,950	31,225
1050-1100	1,975	48,450	1,725	32,950
1100-1150	2,150	50,600	1,550	34,500
1150-1200	2,200	52,800	1,500	36,000
1200-1250	2,175	54,975	1,525	37,525
1250-1300	2,200	57,175	1,500	39,025

TABLE 158
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=3+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,500	3,500	200	200
50- 100	3,050	6,550	650	850
100- 150	2,625	9,175	1,075	1,925
150- 200	2,425	11,600	1,275	3,200
200- 250	2,375	13,975	1,325	4,525
250- 300	2,200	16,175	1,500	6,025
300- 350	1,950	18,125	1,750	7,775
350- 400	1,875	20,000	1,825	9,600
400- 450	2,050	22,050	1,650	11,250
450- 500	2,188	24,237	1,512	12,762
500- 550	2,112	26,350	1,587	14,350
550- 600	2,025	28,375	1,675	16,025
600- 650	2,025	30,400	1,675	17,700
650- 700	2,075	32,475	1,625	19,325
700- 750	2,100	34,575	1,600	20,925
750- 800	2,125	36,700	1,575	22,500
800- 850	2,075	38,775	1,625	24,125
850- 900	1,875	40,650	1,825	25,950
900- 950	1,625	42,275	2,075	28,025
950-1000	1,525	43,800	2,175	30,200
1000-1050	1,600	45,400	2,100	32,300
1050-1100	1,800	47,200	1,900	34,200
1100-1150	2,025	49,225	1,675	35,875
1150-1200	2,087	51,312	1,612	37,487
1200-1250	2,075	53,387	1,625	39,112
1250-1300	2,087	55,475	1,612	40,725

TABLE 159
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=3+00A '
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,500	3,500	200	200
50- 100	3,025	6,525	675	875
100- 150	2,700	9,225	1,000	1,875
150- 200	2,612	11,837	1,087	2,962
200- 250	2,512	14,350	1,187	4,150
250- 300	2,300	16,650	1,400	5,550
300- 350	2,025	18,675	1,675	7,225
350- 400	1,950	20,625	1,750	8,975
400- 450	2,150	22,775	1,550	10,525
450- 500	2,275	25,050	1,425	11,950
500- 550	2,200	27,250	1,500	13,450
550- 600	2,150	29,400	1,550	15,000
600- 650	2,150	31,550	1,550	16,550
650- 700	2,175	33,725	1,525	18,075
700- 750	2,225	35,950	1,475	19,550
750- 800	2,275	38,225	1,425	20,975
800- 850	2,275	40,500	1,425	22,400
850- 900	2,225	42,725	1,475	23,875
900- 950	2,175	44,900	1,525	25,400
950-1000	2,150	47,050	1,550	26,950
1000-1050	2,162	49,212	1,537	28,487
1050-1100	2,162	51,375	1,537	30,025
1100-1150	2,150	53,525	1,550	31,575
1150-1200	2,175	55,700	1,525	33,100
1200-1250	2,225	57,925	1,475	34,575
1250-1300	2,225	60,150	1,475	36,050

TABLE 160
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=5+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,400	3,400	300	300
50- 100	2,987	6,387	712	1,012
100- 150	2,762	9,150	938	1,950
150- 200	2,550	11,700	1,150	3,100
200- 250	2,250	13,950	1,450	4,550
250- 300	2,125	16,075	1,575	6,125
300- 350	2,075	18,150	1,625	7,750
350- 400	2,087	20,237	1,612	9,362
400- 450	2,175	22,412	1,525	10,887
450- 500	2,262	24,675	1,437	12,325
500- 550	2,312	26,987	1,387	13,712
550- 600	2,387	29,375	1,312	15,025
600- 650	2,475	31,850	1,225	16,250
650- 700	2,475	34,325	1,225	17,475
700- 750	2,375	36,700	1,325	18,800
750- 800	2,300	39,000	1,400	20,200
800- 850	2,312	41,312	1,387	21,587
850- 900	2,312	43,625	1,387	22,975
900- 950	2,250	45,875	1,450	24,425
950-1000	2,250	48,125	1,450	25,875
1000-1050	2,300	50,425	1,400	27,275
1050-1100	2,300	52,725	1,400	28,675
1100-1150	2,300	55,025	1,400	30,075
1150-1200	2,275	57,300	1,425	31,500

TABLE 161
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=5+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,425	3,425	275	275
50- 100	3,075	6,500	625	900
100- 150	2,750	9,250	950	1,850
150- 200	2,450	11,700	1,250	3,100
200- 250	2,200	13,900	1,500	4,600
250- 300	2,125	16,025	1,575	6,175
300- 350	2,125	18,150	1,575	7,750
350- 400	2,125	20,275	1,575	9,325
400- 450	2,225	22,500	1,475	10,800
450- 500	2,300	24,800	1,400	12,200
500- 550	2,337	27,137	1,362	13,562
550- 600	2,437	29,575	1,262	14,825
600- 650	2,500	32,075	1,200	16,025
650- 700	2,450	34,525	1,250	17,275
700- 750	2,325	36,850	1,375	18,650
750- 800	2,212	39,063	1,487	20,137
800- 850	2,162	41,225	1,537	21,675
850- 900	2,175	43,400	1,525	23,200
900- 950	2,275	45,675	1,425	24,625
950-1000	2,350	48,025	1,350	25,975
1000-1050	2,350	50,375	1,350	27,325
1050-1100	2,337	52,712	1,362	28,687
1100-1150	2,312	55,025	1,387	30,075
1150-1200	2,275	57,300	1,425	31,500

TABLE 162
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=5+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,400	3,400	300	300
50- 100	3,000	6,400	700	1,000
100- 150	2,750	9,150	950	1,950
150- 200	2,475	11,625	1,225	3,175
200- 250	2,175	13,800	1,525	4,700
250- 300	2,125	15,925	1,575	6,275
300- 350	2,100	18,025	1,600	7,875
350- 400	2,150	20,175	1,550	9,425
400- 450	2,275	22,450	1,425	10,850
450- 500	2,325	24,775	1,375	12,225
500- 550	2,375	27,150	1,325	13,550
550- 600	2,450	29,600	1,250	14,800
600- 650	2,487	32,087	1,212	16,012
650- 700	2,437	34,525	1,262	17,275
700- 750	2,350	36,875	1,350	18,625
750- 800	2,250	39,125	1,450	20,075
800- 850	2,150	41,275	1,550	21,625
850- 900	2,112	43,387	1,587	23,212
900- 950	2,237	45,625	1,462	24,675
950-1000	2,350	47,975	1,350	26,025
1000-1050	2,337	50,312	1,362	27,387
1050-1100	2,312	52,625	1,387	28,775
1100-1150	2,275	54,900	1,425	30,200
1150-1200	2,287	57,187	1,412	31,612

TABLE 163
AGGRADATION AND/OR DEGRADATION

DATE=6-2-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=7+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,500	3,500	200	200
50- 100	3,150	6,650	550	750
100- 150	2,800	9,450	900	1,650
150- 200	2,450	11,900	1,250	2,900
200- 250	2,225	14,125	1,475	4,375
250- 300	2,175	16,300	1,525	5,900
300- 350	2,250	18,550	1,450	7,350
350- 400	2,425	20,975	1,275	8,625
400- 450	2,525	23,500	1,175	9,800
450- 500	2,575	26,075	1,125	10,925
500- 550	2,575	28,650	1,125	12,050
550- 600	2,525	31,175	1,175	13,225
600- 650	2,425	33,600	1,275	14,500
650- 700	2,300	35,900	1,400	15,900
700- 750	2,300	38,200	1,400	17,300
750- 800	2,387	40,587	1,312	18,612
800- 850	2,412	43,000	1,287	19,900
850- 900	2,375	45,375	1,325	21,225
900- 950	2,362	47,737	1,337	22,562
950-1000	2,387	50,125	1,312	23,875
1000-1050	2,400	52,525	1,300	25,175
1050-1100	2,375	54,900	1,325	26,500

TABLE 164
AGGRADATION AND/OR DEGRADATION

DATE=6-18-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=7+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,225	3,225	475	475
50- 100	2,675	5,900	1,025	1,500
100- 150	2,450	8,350	1,250	2,750
150- 200	2,200	10,550	1,500	4,250
200- 250	2,025	12,575	1,675	5,925
250- 300	2,075	14,650	1,625	7,550
300- 350	2,250	16,900	1,450	9,000
350- 400	2,400	19,300	1,300	10,300
400- 450	2,475	21,775	1,225	11,525
450- 500	2,500	24,275	1,200	12,725
500- 550	2,437	26,712	1,262	13,987
550- 600	2,312	29,025	1,387	15,375
600- 650	2,200	31,225	1,500	16,875
650- 700	2,175	33,400	1,525	18,400
700- 750	2,225	35,625	1,475	19,875
750- 800	2,250	37,875	1,450	21,325
800- 850	2,275	40,150	1,425	22,750
850- 900	2,312	42,462	1,387	24,137
900- 950	2,325	44,787	1,375	25,512
950-1000	2,312	47,100	1,387	26,900
1000-1050	2,275	49,375	1,425	28,325
1050-1100	2,237	51,612	1,462	29,787

TABLE 165
AGGRADATION AND/OR DEGRADATION

DATE=9-17-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=7+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,475	3,475	225	225
50- 100	3,075	6,550	625	850
100- 150	2,675	9,225	1,025	1,875
150- 200	2,325	11,550	1,375	3,250
200- 250	2,075	13,625	1,625	4,875
250- 300	1,962	15,587	1,737	6,612
300- 350	2,012	17,600	1,687	8,300
350- 400	2,250	19,850	1,450	9,750
400- 450	2,400	22,250	1,300	11,050
450- 500	2,400	24,650	1,300	12,350
500- 550	2,387	27,037	1,312	13,662
550- 600	2,337	29,375	1,362	15,025
600- 650	2,287	31,662	1,412	16,437
650- 700	2,337	34,000	1,362	17,800
700- 750	2,375	36,375	1,325	19,125
750- 800	2,262	38,637	1,437	20,562
800- 850	2,225	40,862	1,475	22,037
850- 900	2,250	43,112	1,450	23,487
900- 950	2,212	45,325	1,487	24,975
950-1000	2,225	47,550	1,475	26,450
1000-1050	2,237	49,787	1,462	27,912
1050-1100	2,225	52,012	1,475	29,387

TABLE 166
AGGRADATION AND/OR DEGRADATION

DATE=10-13-81
DIKE NUMBER=98.9R
BOTTOM DATUM = 290

RANGE NUMBER=7+00A'
TOP DATUM = 364

STATION INCREMENT	INCREMENTAL BED AREA	ACCUMULATED BED AREA	INCREMENTAL WATER AREA	ACCUMULATED WATER AREA
0- 50	3,500	3,500	200	200
50- 100	3,150	6,650	550	750
100- 150	2,800	9,450	900	1,650
150- 200	2,450	11,900	1,250	2,900
200- 250	2,200	14,100	1,500	4,400
250- 300	2,125	16,225	1,575	5,975
300- 350	2,250	18,475	1,450	7,425
350- 400	2,475	20,950	1,225	8,650
400- 450	2,575	23,525	1,125	9,775
450- 500	2,587	26,112	1,112	10,887
500- 550	2,562	28,675	1,137	12,025
550- 600	2,500	31,175	1,200	13,225
600- 650	2,450	33,625	1,250	14,475
650- 700	2,500	36,125	1,200	15,675
700- 750	2,537	38,662	1,162	16,837
750- 800	2,462	41,125	1,237	18,075
800- 850	2,375	43,500	1,325	19,400
850- 900	2,400	45,900	1,300	20,700
900- 950	2,425	48,325	1,275	21,975
950-1000	2,375	50,700	1,325	23,300
1000-1050	2,350	53,050	1,350	24,650
1050-1100	2,375	55,425	1,325	25,975

TABLE 167
BED AND WATER ARE (ft²)
Dike 114.0L

		Dates			
Range		5-30-81	6-16-81	9-14-81	10-16-81
1+00A'	Bed	46387	47100	47575	45625
	Water	36612	35900	35425	37375
3+00A'	Bed	46087	46575	46325	45212
	Water	28612	28125	28375	29487
5+00A'	Bed	49950	49087	48800	48912
	Water	24750	25612	25900	25787
7+00A'	Bed	*	49462	49800	49027
	Water	*	25237	24900	25662
9+00A'	Bed	*	49725	50237	47675
	Water	*	24975	24462	27025

*Missing Data assumed same as 6-16-81.

Total volumes in acre-feet between ranges 1+00 to 9+00:

	Bed	888.68	888.60	889.95	871.45
	Water	502.26	502.35	501.00	519.33
AC-FT/Day:	5-30-81 to 6-16-81 (18 days)	Bed	-0.004	Water	+0.004
	6-16-81 to 9-14-81 (90 days)		+0.015		-0.015
	9-14-81 to 10-16-81 (32 days)		-0.57		+0.57

TABLE 168
BED AND WATER AREA (ft²) BELOW TOP
OF DIKE 114.0L (E1. 358.0 MSL)

		Dates			
Range		5-30-81	6-16-81	9-14-81	10-16-81
1+00A'	Bed	35105	37116	36721	35486
	Water	13595	12737	12367	14021
3+00A'	Bed	36537	39790	36175	37551
	Water	7454	6726	7325	8057
5+00A'	Bed	36850	39580	38937	38812
	Water	3750	4448	4816	4687
7+00A'	Bed	*	40672	41450	41490
	Water	*	3909	3500	4174
9+00A'	Bed	*	41325	41837	39670
	Water	*	3625	3112	5570

*Missing Data assumed same as 6-16-81.

Total volumes in acre-feet between ranges 1+00 to 9+00:

	Bed	699.15	731.23	715.52	713.64
	Water	108.92	106.81	107.35	122.65
AC-FT/Day:	5-30-81 to 6-16-81 (18 days)	Bed +1.78		Water -0.12	
	6-16-81 to 9-14-81 (90 days)	-0.17		+0.006	
	9-14-81 to 10-16-81 (32 days)	-0.06		+0.48	

TABLE 169
BED AND WATER AREAS (ft²)
Dike 113.9L

Range		Dates			
		5-31-81	6-16-81	9-15-81	10-17-81
1+00A	Bed	42000	41125	40700	38712
	Water	31500	32375	32800	34787
3+00A	Bed	46600	46512	45912	44437
	Water	26900	26987	27587	29062
5+00A	Bed	49237	48337	49625	47830
	Water	27762	28662	27375	29170
7+00A	Bed	51537	49762	50025	47975
	Water	25462	27237	26975	29025
9+00A	Bed	54237	53800	51775	50925
	Water	26262	26700	28725	29575

Total volumes in acre-feet between ranges 1+00 to 9+00:

Bed	897.58	881.88	880.62	849.68
Water	500.48	516.18	517.44	548.38

AC-FT/Day:	5-31-81 to 6-16-81 (17 days)	Bed	Water
		-0.92	+0.92
	6-16-81 to 9-15-81 (91 days)	-0.014	+0.014
	9-15-81 to 10-17-82 (32 days)	-0.97	+0.97

TABLE 170
 BED AND WATER AREA (ft²) BELOW TOP
 OF DIKE 113.9L (El. 358.0 MSL)

		Dates			
Range		5-31-81	6-16-81	9-15-81	10-17-81
1+00A	Bed	30308	29923	29675	32007
	Water	9692	10674	11125	12632
3+00A	Bed	35550	35537	34502	34303
	Water	5250	5262	5817	7295
5+00A	Bed	38312	39304	38950	37872
	Water	4887	5503	4250	6128
7+00A	Bed	35854	37829	36575	39400
	Water	3338	4578	4225	6200
9+00A	Bed	39675	42425	42134	41494
	Water	3525	3175	5074	5907

Total volumes in acre-feet between ranges 1+00 to 9+00:

	Bed	664.41	683.40	670.03	681.02
	Water	92.23	102.24	102.81	132.66
AC-FT/Day:	5-31-81 to 6-16-81 (17 days)	Bed +1.12		Water +0.59	
	6-16-81 to 9-15-81 (91 days)	-0.15		+0.006	
	9-15-81 to 10-17-81 (32 days)	+0.34		+0.93	

TABLE 171
BED AND WATER AREAS (ft²)
Dike 113.5L

Range		Dates			
		5-31-81	6-19-81	9-15-81	10-17-81
1+00A	Bed	62000	63637	61950	61600
	Water	50000	48362	50050	50400
3+00A	Bed	75487	73925	71687	71987
	Water	36512	38075	40312	40012
5+00A	Bed	80050	76412	78350	76700
	Water	35950	39587	37650	39300
7+00A	Bed	81387	79000	79650	78312
	Water	34612	37000	36350	37687
9+00A	Bed	81750	81875	82562	80762
	Water	38250	38125	37437	39237

Total volumes in acre-feet between ranges 1+00 to 9+00:

Bed		1417.81	1387.02	1386.33	1369.05
Water		694.21	725.00	725.69	742.96
AC-FT/Day:	5-31-81 to 6-19-81 (20 days)	Bed -1.54		Water +1.54	
	6-19-81 to 9-15-81 (88 days)	-0.008		+0.008	
	9-15-81 to 10-17-81 (32 days)	-0.54		+0.54	

TABLE 172
BED AND WATER AREA (ft²) BELOW TOP
OF DIKE 113.5L (E1. 357.5 MSL)

		Dates			
Range		5-31-81	6-19-81	9-15-81	10-17-81
1+00A	Bed	45700	45137	43153	43400
	Water	21433	20412	21823	21848
3+00A	Bed	49946	51417	55894	53895
	Water	9164	10740	11668	11855
5+00A	Bed	52263	50925	49137	51152
	Water	8113	11520	9799	11236
7+00A	Bed	46810	47691	45713	45608
	Water	7342	9475	8913	10299
9+00A	Bed	44896	45588	42466	43050
	Water	10247	10474	9686	11625

Total volumes in acre-feet between ranges 1+00 to 9+00:

Bed	892.18	897.13	888.68	890.17
Water	185.76	216.61	211.82	230.15

AC-FT/Day:	5-31-81 to 6-19-81 (20 days)	Bed +0.25	Water +1.54
	6-19-81 to 9-15-81 (88 days)	-0.42	-0.05
	9-15-81 to 10-17-81 (32 days)	+0.05	+0.57

TABLE 173
BED AND WATER AREAS (ft²)
Dike 103.3R

		Dates			
Range		6-1-81	6-18-81	9-18-81	10-16-81
1+00	Bed	37775	34837	34375	36950
	Water	27025	29962	30425	27850
3+00	Bed	38750	36450	36500	37075
	Water	22450	24750	24700	24125
5+00	Bed	33250	32787	33300	33587
	Water	20750	21212	20700	20412
7+00	Bed	26987	27487	27550	28262
	Water	19812	19312	19250	18537
9+00	Bed	24600	25425	25875	26250
	Water	18600	17775	17325	16950

Total Volumes in acre-feet between ranges 1+00 to 9+00:

Bed	597.68	583.26	585.28	599.28
Water	394.05	409.29	406.45	392.44

AC-FT/Day:	6-1-81 to 6-18-81 (18 days)	Bed -0.80	Water +0.85
	6-18-81 to 9-18-81 (92 days)	+0.02	-0.03
	9-18-81 to 10-16-81 (28 days)	+0.50	-0.50

TABLE 174
BED AND WATER AREA (ft²) BELOW TOP
OF DIKE 103.3R (E1. 352.1 MSL)

Range		Dates			
		6-1-81	6-18-81	9-18-81	10-16-81
1+00	Bed	32703	31220	30656	31803
	Water	9760	12544	13013	10607
3+00	Bed	34969	32134	31846	32149
	Water	6330	8424	8411	7940
5+00	Bed	25988	27588	28010	27512
	Water	6928	7034	6526	6352
7+00	Bed	22088	24230	24638	25183
	Water	7125	6692	6622	5913
9+00	Bed	20825	22513	22796	22803
	Water	7027	6142	5679	5332

Total volumes in acre-feet between ranges 1+00 to 9+00:

Bed	504.17	508.81	510.65	514.91
Water	132.12	144.60	141.90	129.36

AC-FT/Day:		Bed	Water
		+0.26	+0.69
	6-1-81 to 6-18-81 (18 days)		
	6-18-81 to 9-18-81 (92 days)	+0.02	-0.03
	9-18-81 to 10-16-81 (28 days)	+0.15	-0.45

TABLE 175
BED AND WATER AREAS (ft²)
Dike 103.2L

Range		Dates			
		5-31-81	6-17-81	9-16-81	10-15-81
1+00	Bed	*	*	31337	33237
	Water	*	*	55562	53662
3+ 0	Bed	42237	41875	43537	43375
	Water	44662	45025	43362	43525
5+00A	Bed	43925	40500	41812	42100
	Water	23225	26650	25337	25050
7+00C	Bed	20962	20262	20062	19725
	Water	14587	15287	15487	15825
9+00C	Bed	19287	20775	20650	20325
	Water	8362	10825	10950	11275

*Missing Data (assumed same as 9-16-81).

Total volumes in acre-feet between ranges 1+00 to 9+00:

	Bed	608.06	590.88	603.33	605.97
	Water	525.42	551.68	539.22	536.58
AC-FT/Day:	5-31-81 to 6-17-81 (18 days)	<u>Bed</u> -0.96		<u>Water</u> +1.46	
	6-17-81 to 9-16-81 (91 days)	+0.14		-0.14	
	9-16-81 to 10-15-81 (29 days)	+0.09		-0.09	

TABLE 176
BED AND WATER AREA (ft²) BELOW TOP
OF DIKE 103.2L (E1. 352.0 MSL)

		Dates			
Range		5-31-81	6-17-81	9-16-81	10-15-81
1+00	Bed	*	*	31337	33237
	Water	*	*	36862	34962
3+00	Bed	39491	36468	37915	37520
	Water	26203	26896	25234	25371
5+00A	Bed	31363	33364	29569	30856
	Water	10488	13249	12542	12152
7+00C	Bed	15391	15112	15479	16000
	Water	7397	8050	8216	8455
9+00C	Bed	13054	14835	14710	16172
	Water	2783	4385	4510	4702

*Missing Data (assumed same as 9-16-81).

Total volumes in acre-feet between ranges 1+00 to 9+00:

Bed	497.89	496.00	486.62	500.83
Water	293.44	315.97	306.14	300.16

AC-FT/Day:	5-31-81 to 6-17-81 (18 days)	Bed -0.11	Water +1.25
	6-17-81 to 9-16-81 (91 days)	-0.10	-0.11
	9-16-81 to 10-15-81 (29 days)	+0.49	-0.21

TABLE 177
BED AND WATER AREAS (ft²)
Dike 102.2L

		Dates			
Range		6-1-81	6-17-81	9-16-81	10-15-81
1+00	Bed	54987	50450	50925	53875
	Water	37412	41950	41475	38525
3+00	Bed	65250	61562	64387	63775
	Water	27150	30837	28012	28625
5+00B	Bed	53675	51400	52662	53150
	Water	23325	25600	24337	23850
7+00B	Bed	57975	57125	57625	58862
	Water	22875	23725	23225	21987
9+00B	Bed	65050	64100	64050	65000
	Water	23500	24450	24500	23550

Total volumes in acre-feet between ranges 1+00 to 9+00:

	Bed	1087.80	1043.90	1065.94	1080.00
	Water	476.61	520.49	498.45	484.39
AC-FT/Day:	6-1-81 to 6-17-81 (17 days)		Bed -2.58	Water +2.58	
	6-17-81 to 9-16-81 (91 days)		+0.24	-0.24	
	9-16-81 to 10-15-81 (29 days)		+0.48	-0.48	

TABLE 178
BED AND WATER AREA (ft²) BELOW TOP
OF DIKE 102.2L (E1. 351.5 MSL)

Range		Dates			
		6-1-81	6-17-81	9-16-81	10-15-81
1+00	Bed	38222	39113	40388	41775
	Water	20888	24702	24188	21263
3+00	Bed	39244	39295	41288	41075
	Water	11883	14959	12137	12738
5+00B	Bed	48084	47437	48745	48719
	Water	8221	10333	9065	8609
7+00B	Bed	50288	51455	52169	53271
	Water	7118	7870	7335	6110
9+00B	Bed	55201	57681	57213	58163
	Water	6633	7282	7363	6413

Total volumes in acre-feet between ranges 1+00 to 9+00:

Bed	846.32	856.68	876.96	886.29
Water	188.17	242.21	203.46	189.60

AC-FT/Day:		Bed	Water
		+0.61	+3.18
	6-1-81 to 6-17-81 (17 days)		
	6-17-81 to 9-16-81 (91 days)	+0.22	-0.43
	9-16-81 to 10-15-81 (29 days)	+0.32	-0.48

TABLE 179
BED AND WATER AREAS (ft²)
Dike 100.1R

		Dates			
Range		6-2-81	6-19-81	9-17-81	10-13-81
-1+76	Bed	58062	59625	60075	63087
	Water	49937	48375	47925	44912
1+00	Bed	57650	57100	58100	58787
	Water	50350	50900	49900	49212
3+00	Bed	58400	58775	60575	60900
	Water	33600	33225	31425	31100
5+00	Bed	63612	61825	61775	64350
	Water	28387	30175	30225	27650
7+00	Bed	69525	67700	69375	68200
	Water	22475	24300	22625	23800

Total volumes in acre-feet between ranges -1+76 to 7+00:

Bed	1117.79	1108.18	1125.69	1146.38
Water	682.02	691.63	674.13	653.43

AC-FT/Day:		Bed	Water
		-0.56	+0.56
	6-2-81 to 6-19-81 (17 days)		
	6-19-81 to 9-17-81 (90 days)	+0.19	-0.19
	9-17-81 to 10-13-81 (26 days)	+0.80	-0.80

TABLE 180
BED AND WATER AREA (ft²) BELOW TOP
OF DIKE 100.1R (E1. 350.4 MSL)

		Dates			
Range		6-2-81	6-19-81	9-17-81	10-13-81
-1+76	Bed	49472	48980	51510	55132
	Water	24215	22896	22178	19159
1+00	Bed	41306	47160	42575	42864
	Water	26258	25622	25583	25025
3+00	Bed	39231	39987	36282	36674
	Water	13196	13744	11595	11284
5+00	Bed	41974	43425	43300	45452
	Water	8036	9727	9852	7338
7+00	Bed	39310	44203	46437	45112
	Water	3966	5024	3299	4624

Total volumes in acre-feet between ranges -1+76 to 7+00:

Bed	766.31	813.42	785.72	804.00
Water	282.74	289.50	274.42	255.00

		Bed	Water
AC-FT/Day:	6-2-82 to 6-19-81 (17 days)	+2.77	+0.40
	6-19-81 to 9-17-81 (90 days)	-0.31	-0.17
	9-17-81 to 10-13-81 (26 days)	+0.70	-0.75

TABLE 181
BED AND WATER AREAS (ft²)
Dike 98.9R

Range		Dates			
		6-2-81	6-18-81	9-17-81	10-13-81
-2+00	Bed	65700	65025	63500	67375
	Water	30500	31175	32700	28825
1+00	Bed	52725	52312	48275	54100
	Water	47175	47587	51625	45800
3+00	Bed	57350	57175	55475	60150
	Water	38850	39025	40725	36050
5+00	Bed	*	57300	57300	57187
	Water	*	31500	31500	31612
7+00	Bed	54900	51612	52012	55425
	Water	26500	29787	29387	25975

*Missing Data assumed same as 6-18-81.

Total volumes in acre-feet between ranges -2+00 to 7+00:

Bed	1181.27	1168.22	1132.92	1208.47
Water	759.61	772.65	807.96	732.41

AC-FT/Day:	6-2-81 to 6-18-81 (16 days)	Bed	Water
		-0.82	+0.82
	6-18-81 to 9-17-81 (91 days)	-0.39	+0.39
	9-17-81 to 10-13-81 (26 days)	+2.91	-2.91

TABLE 182
BED AND WATER AREAS (ft²) BELOW TOP
OF DIKE 98.9R (E1. 350.0 MSL)

Range		Dates			
		6-2-81	6-18-81	9-17-81	10-13-81
-2+00	Bed	58865	61888	56717	59835
	Water	12535	13112	14779	10965
1+00	Bed	43341	44778	40196	45775
	Water	29163	29408	33557	27725
3+00	Bed	51589	52775	50145	55000
	Water	21821	21230	23055	18051
5+00	Bed	*	52494	51679	52287
	Water	*	15101	15183	15212
7+00	Bed	48644	49146	46487	49169
	Water	11735	14556	14507	11210

*Missing Data assumed same as 6-18-81.

Total volumes in acre-feet between ranges -2+00 to 7+00:

Bed	1041.00	1066.26	1000.23	1075.60
Water	407.00	414.16	452.35	375.34

AC-FT/Day:		Bed	Water
		+1.58	+0.45
	6-2-81 to 6-18-81 (16 days)		
	6-18-81 to 9-17-81 (91 days)	-0.73	+0.42
	9-17-81 to 10-13-81 (26 days)	+2.90	-2.96

TABLE 183. PHYSICAL CHARACTERISTICS OF EIGHT
DIKES IN THE MIDDLE MISSISSIPPI
RIVER.

Dike	Type	Length(ft)	Date notched	Notch			River stage at base(ft) ^b
				Location(ft) ^a	Width(ft)	Depth(ft)	
98.9RC	wing	1,380	19 December 1975	790	330	7	11
100.1R	wing- trail	1,085 500	28 August 1973	500	150	10	12
102.2L	wing	1,350	28 February 1973	650	150	8	8
103.2L	wing- trail	1,420 590	-	-	-	-	-
103.3R	wing	900	-	-	-	-	-
113.5L	wing	1,300	9 November 1973	750	150	4	12
113.9L	wing	1,050	13 November 1973	600	150	4	12
114.0L	wing	970	-	-	-	-	-

^aDistance from base of dike.

^bChester, Illinois gage, Fall, 1981.

^cData unavailable for shallow notch near base.

TABLE 184. COMMON AND SCIENTIFIC NAMES OF
FISHES COLLECTED
IN THE MIDDLE MISSISSIPPI RIVER.

Lamprey Family - Petromyzontidae

Chestnut lamprey, Ichthyomyzon castaneus Girard

Sturgeon Family - Acipenseridae

Shovelnose sturgeon, Scaphirhynchus platyrhynchus (Rafinesque)

Pallid sturgeon, Scaphirhynchus albus (Forbes and Richardson)

Paddlefish Family - Polyodontidae

Paddlefish, Polyodon spathula (Walbaum)

Gar Family - Lepisosteidae

Shortnose gar, Lepisosteus platostomus Rafinesque

Longnose gar, Lepisosteus osseus (Linnaeus)

Bowfin Family - Amiidae

Bowfin, Amia calva Linnaeus

Eel Family - Anguillidae

American eel, Anguilla rostrata (Lesueur)

Herring Family - Clupeidae

Skipjack herring, Alosa chrysochloris (Rafinesque)

Alabama shad, Alosa alabamae Jordan and Evermann

Gizzard shad, Dorosoma cepedianum (Lesueur)

Threadfin shad, Dorosoma petenense (Gunther)

Mooneye Family - Hiodontidae

Goldeye, Hiodon alosoides (Rafinesque)

Mooneye, Hiodon tergisus Lesueur

Minnow Family - Cyprinidae

Carp, Cyprinus carpio Linnaeus

Silver chub, Hybopsis storeriana (Kirtland)

Emerald shinner, Notropis atherinoides Rafinesque

Silverband shiner, Notropis shumardi (Girard)

Largescale stoneroller, Camptostoma oligolepis Hubbs and Greene

TABLE 184. (CONTINUED)

 Sucker Family - Catostomidae

Blue sucker, Cycleptus elongatus (Lesueur)
 Bigmouth buffalo, Ictiobus cyprinellus (Valenciennes)
 Black buffalo, Ictiobus niger (Rafinesque)
 Smallmouth buffalo, Ictiobus bubalus (Rafinesque)
 River carpsucker, Carpiodes carpio (Rafinesque)
 Quillback, Carpiodes cyprinus (Lesueur)

Catfish Family - Ictaluridae

Black bullhead, Ictalurus melas (Rafinesque)
 Channel catfish, Ictalurus punctatus (Rafinesque)
 Blue catfish, Ictalurus furcatus (Lesueur)
 Tadpole madtom, Noturus gyrinus (Mitchill)
 Stonecat, Noturus flavus Rafinesque
 Flathead catfish, Pylodictis olivaris (Rafinesque)

Livebearer Family - Poeciliidae

Mosquitofish, Gambusia affinis (Baird and Girard)

Sea Bass Family - Percichthyidae

White bass, Morone chrysops (Rafinesque)
 Yellow bass, Morone mississippiensis Jordan and Eigenmann

Sunfish Family - Centrarchidae

Spotted bass, Micropterus punctulatus (Rafinesque)
 Largemouth bass, Micropterus salmoides (Lacepede)
 Green sunfish, Lepomis cyanellus Rafinesque
 Orangespotted sunfish, Lepomis humilis (Girard)
 Longear sunfish, Lepomis megalotis (Rafinesque)
 Bluegill, Lepomis macrochirus Rafinesque
 White crappie, Pomoxis annularis Rafinesque
 Black crappie, Pomoxis nigromaculatus (Lesueur)

Perch Family - Percidae

Walleye, Stizostedion vitreum (Mitchill)
 Sauger, Stizostedion canadense (Smith)

Drum Family - Sciaenidae

Freshwater drum, Aplodinotus grunniens Rafinesque

TABLE 185. THE NUMBERS AND RELATIVE ABUNDANCE OF FISHES COLLECTED AT EIGHT DIKES IN THE MIDDLE MISSISSIPPI RIVER.
T = trace (< 0.1%)

Species	Dike								Totals	% species was found	Total number of dikes at which each species was found
	93.9Ra No.	100.1Ra No.	102.2La No.	103.2Lb No.	103.3Rb No.	113.5La No.	113.9La No.	114.0Lb No.			
Ghostnut lamprey	11	2.1	1	0.2	1	0.2	3	0.5	1	T	1
Shovelnose sturgeon	1	0.2							20	0.4	6
Pallid sturgeon									1	T	1
Paddlefish		2	0.3	6	0.9				10	0.2	3
Shortnose gar	15	2.9	19	4.0	17	2.5	18	3.7	142	3.1	8
Longnose gar	1	0.2	2	0.3	1	0.2	3	0.5	18	0.4	7
Bowfin			2	0.4	1	0.2			3	T	2
American eel	1	0.2	1	0.2	1	0.2	1	0.2	6	0.1	6
Skipjack herring	3	0.6	1	0.1	2	0.3			9	0.2	5
Alabama shad	1	0.2							1	T	1
Gizzard shad	304	53.8	412	60.4	271	56.8	266	54.1	2,403	53.3	8
Threadfin shad	2	0.4	7	1.0	5	1.0	9	1.8	76	1.7	8
Guldeye		4	0.6	3	0.6	4	5	1.0	21	0.5	6
Mooneye		1	0.1						1	T	1
Carp	61	11.8	49	7.2	38	8.0	45	9.2	432	9.6	8
Silver chub			1	0.2	1	0.2			2	T	2
Emerald shiner	1	0.2	8	1.7	103	15.3	3	0.5	144	3.2	8
Silverband shiner	1	0.2							2	T	2
Largescale stoneroller							1	0.2	1	T	1
Blue sucker									1	T	1
Gimouth buffalo	12	2.3	15	2.2	6	1.3	11	1.6	84	1.9	8
Black buffalo	2	0.4	8	1.2	2	0.4	3	0.5	27	0.6	7
Smallmouth buffalo	1	0.2	6	0.9	3	0.6	2	0.3	20	0.4	8
River carpsucker	15	2.9	72	10.6	70	14.7	42	8.6	345	7.6	8
Quillback	1	0.2	1	0.1	1	0.2			6	0.1	6
Black bullhead							2	0.4	2	T	1
Channel catfish	12	2.3	10	1.5	4	0.8	5	0.8	81	1.8	8
Blue catfish	14	2.7	4	0.6	9	1.9	8	1.2	59	1.3	8

TABLE 185. (CONTINUED)

Species	Dike												Totals	%	Total number of dikes at which each species was found					
	98.9R ^a		100.1R ^a		102.2L ^a		103.2LB		103.3RB		113.5L ^a					113.9L ^a		114.0LB		
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%			
Flathead catfish	10	1.9	11	1.6	8	1.7	8	1.2	12	2.4	23	3.7	12	2.2	15	3.0	99	2.2	8	
Tadpole madtom												1	0.2				1	T	1	
Stoneroller												1	0.2				1	T	1	
Mosquitofish			1	0.1													1	T	1	
White bass	1	0.2	14	2.1	5	1.0	10	1.5	8	1.6	6	1.0	7	1.3	6	1.2	57	1.3	8	
Yellow bass													1	0.2			1	T	1	
Spotted bass																	1	T	1	
Largemouth bass													1	0.2			2	T	2	
Green sunfish												2	0.3	5	0.9	1	0.2	9	0.2	4
Orangespotted sunfish														2	0.4		2	T	1	
Longear sunfish														1	0.2		1	T	1	
Bluegill	5	1.0	7	1.0	2	0.4	11	1.6	3	0.6	7	1.1	2	0.4	1	0.2	38	0.8	8	
White crappie	5	1.0	3	0.4	5	1.0	4	0.6	4	0.8	8	1.3	7	1.3	9	1.8	45	1.0	8	
Black crappie	1	0.2	4	0.6	2	0.4	3	0.5	4	0.8	5	0.8	4	0.7	8	1.6	31	0.7	8	
Walleye													1	0.2			2	T	2	
Sauger	3	0.6			2	0.4			3	0.6	4	0.6	3	0.5			15	0.3	5	
Freshwater drum	33	6.4	31	5.0	4	0.8	38	5.6	46	9.4	49	7.8	37	6.7	50	10.1	288	6.4	8	
Number of fish	517		682		477		673		491		630		549		493		4,512			
Number of species	26		25		24		27		21		27		31		26		45			

^a Notched.^b Unnotched.

AD-A121 583

THE INFLUENCE OF CHANNEL REGULATING STRUCTURES ON FISH
AND WILDLIFE HABIT. (U) MISSOURI UNIV-ROLLA INST OF
RIVER STUDIES R H SMITH ET AL. AUG 82 DACH43-81-C-0061

373

UNCLASSIFIED

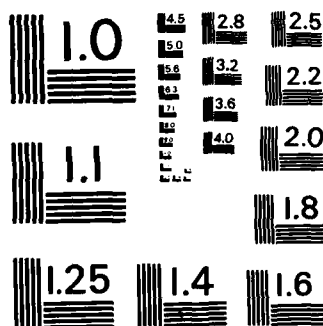
F/G 13/2

NL

END

FILED

DTIC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 186. PERCENTAGE COMPOSITION OF GROUPS OF FISHES COLLECTED AT EIGHT DIKES IN THE MIDDLE MISSISSIPPI RIVER.

Category (No. of fish)	Dike								Total (%)
	98.9R ^g	100.1R ^g	102.2L ^g	103.2L ^h	103.3R ^h	113.5L ^g	113.9L ^g	114.0L ^h	
Sturgeons ^a (21)	57	0	5	5	0	14	14	5	100
Paddlefish (10)	0	20	0	60	20	0	0	0	100
Herring ^b (2,488)	13	17	11	13	11	13	13	9	100
Carp (432)	14	11	9	15	10	16	12	13	100
Buffalo ^c (131)	12	22	8	12	6	20	9	11	100
Carp suckers ^d (351)	5	21	20	15	12	14	6	7	100
Catfish ^e (241)	15	10	9	9	10	15	12	20	100
White bass and yellow bass (58)	2	24	9	17	14	10	14	10	100
Sunfish ^f (129)	8	11	7	16	8	18	17	15	100
Walleye and sauger (17)	18	0	12	6	18	23	23	0	100
Freshwater drum (288)	12	11	1	13	16	17	13	17	100

^a Shovelnose sturgeon and pallid sturgeon.

^b Skipjack herring, gizzard shad, and threadfin shad.

^c Bigmouth buffalo, black buffalo, and smallmouth buffalo.

^d River carpsucker and quillback.

^e Black bullhead, channel catfish, blue catfish, and flathead catfish.

^f Spotted bass, largemouth bass, green sunfish, orangespotted sunfish, longear sunfish, bluegill, white crappie, and black crappie.

^g Notched.

^h Unnotched.

TABLE 187. PERCENTAGE COMPOSITION OF GROUPS OF FISHES COLLECTED AT THREE UNNOTCHED AND FIVE NOTCHED DIKES IN THE MIDDLE MISSISSIPPI RIVER.

Category (No. of fish)	Dikes	
	Unnotched ^g	Notched ^h
Sturgeons ^a (21)	5	95
Paddlefish (10)	80	20
Herring ^b (2,488)	33	67
Carp (432)	38	62
Buffalo ^c (131)	30	70
Carp suckers ^d (351)	34	66
Catfish ^e (241)	39	61
White bass and yellow bass (58)	41	59
Sunfish ^f (129)	39	61
Walleye and sauger (17)	24	76
Freshwater drum (288)	47	53

^a Shovelnose sturgeon and pallid sturgeon.

^b Skipjack herring, gizzard shad, and threadfin shad.

^c Bigmouth buffalo, black buffalo, and smallmouth buffalo.

^d River carpsucker and quillback.

^e Black bullhead, channel catfish, blue catfish, and flathead catfish.

^f Spotted bass, largemouth bass, green sunfish, orangespotted sunfish, longear sunfish, bluegill, white crappie, and black crappie.

^g Dikes 103.2L, 103.3R, and 114.0L.

^h Dikes 98.9R, 100.1R, 102.2L, 113.5L, and 113.9L.

TABLE 188. NUMBER OF SPECIES AND TOTAL NUMBER OF FISH COLLECTED AT EIGHT DIKES IN THE MIDDLE MISSISSIPPI RIVER. MARGALEF (d) AND SHANNON-WEAVER (\bar{d}) DIVERSITY INDEX VALUES WERE CALCULATED FOR FISH COMMUNITIES AT EACH DIKE AND ALL DIKES COMBINED.

Dikes	Number of species	Number of fish	Margalef d	Shannon-Weaver \bar{d}
98.9R	26	517	4.00	2.44
100.1R	25	682	3.68	2.37
102.2L	24	477	3.73	2.45
103.2L	27	673	3.99	2.86
103.3R	21	491	3.23	2.56
113.5L	27	630	4.03	2.91
113.9L	31	549	4.76	2.64
114.0L	26	493	4.03	2.96
Unnotched ^a	33	1,657	3.75 ^c	2.79 ^c
Notched ^b	42	2,855	4.04 ^c	2.56 ^c
All dikes	45	4,512	3.93 ^c	2.65 ^c

^a Dikes 103.2L, 103.3R, and 114.0L.

^b Dikes 98.9R, 100.1R, 102.2L, 113.5L, and 113.9L.

^c Average value.

TABLE 189. CAPTURE RATES OF FISH BY GEAR TYPE AT
EACH DIKE AND ALL DIKES
COMBINED IN THE MIDDLE MISSISSIPPI
RIVER.

Dike	Gear type					All nets combined ^b
	Notched	Electrofishing ^a	Hoop nets ^b	Gill nets ^b	Trammel nets ^b	
98.9R	X	139	2.6	18.1	18.0	5.1
100.1R	X	200	2.8	15.4	23.6	5.8
102.2L	X	159	1.8	9.7	22.5	4.6
103.2L		186	2.6	12.7	20.0	5.4
103.3R		146	1.6	21.9	23.1	6.0
113.5L	X	154	2.5	12.0	25.4	5.6
113.9L	X	136	1.3	31.7	13.9	4.8
114.0L		109	2.1	19.8	15.3	4.8
Unnotched		145	2.1	18.0	19.6	5.4
Notched		157	2.2	17.0	21.1	5.2
All dikes		153	2.1	17.4	20.5	5.3

^a Fish captured per hour.

^b Fish captured per net day (24 hours).

TABLE 190. SEASONAL CAPTURE RATES OF FISH BY GEAR TYPE
AT EIGHT DIKES^a IN THE MIDDLE MISSISSIPPI
RIVER.

Sampling period	Gear type				All nets combined ^c
	Electrofishing ^b	Hoop nets ^c	Gill nets ^c	Trammel nets ^c	
1	314	3.4	20.6	18.3	6.5
2	18	2.5	10.5	17.4	4.5
3	222	1.4	12.6	29.8	5.2
4	147	1.2	26.0	16.7	5.1
Average	153	2.1	17.4	20.5	5.3

^a Dikes 98.9R, 100.1R, 102.2L, 103.2L, 103.3R, 113.5L, 113.9L, and 114.0L.

^b Fish captured per hour.

^c Fish captured per net day (24 hours).

TABLE 191. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF GIZZARD SHAD CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike							Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b
0- 19								
20- 39	4	3		4		1	1	13
40- 59	66	32	5	3	6	11	16	4
60- 79	20	73	63	16	37	27	45	17
80- 99	35	62	72	15	31	45	49	31
100-119	33	54	50	23	27	24	20	20
120-139	38	46	28	48	40	25	18	13
140-159	7	12	7	24	9	29	21	13
160-179	6	3	5	16	7	28	21	8
180-199	9	32	10	17	22	35	20	26
200-219	28	41	5	33	13	24	33	30
220-239	22	24	7	27	13	18	23	21
240-259	8	6	5	12	18	9	21	13
260-279	10	8	2	16	15	3	16	6
280-299	2	3	1	10	7	2	4	4
300-319	3	4	1	7	5	2	3	4
320-339	5	4	4	11	5	5	3	1
340-359	6	1	4	11	6	7	1	9
360-379	1	2	1	9	4	5	2	3
380-399	1	1	1	3	1	2		1
400-419		1				1	1	
420-439								
440-459								
460-479								
480-499								
500-519								
520-539								
540-559								
560-579								
580-599								
600-619								
620-639								
640-659								
660-679								
680-699								
Total	304	412	271	305	266	303	318	224
Mean length	137	135	119	191	165	161	156	188

^a Notched.

^b Unnotched.

TABLE 192. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF CARP CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 19									
20- 39									
40- 59									
60- 79									
80- 99									
100-119									
120-139									
140-159									
160-179									
180-199		1			1				2
200-219				1	1				2
220-239									
240-259	1				1				2
260-279									
280-299	1	1	1	1	1	1			6
300-319	2	2	1	3	3	1	3	1	16
320-339	3	3	3	1	2	3	3		18
340-359	5	5	3	8	3	2	7	3	36
360-379	8	5	3	6	2	9	4	4	41
380-399	12	4	5	7	2	13	4	10	57
400-419	5	6	2	7	7	8	7	7	49
420-439	8	6	7	8	6	8	7	11	61
440-459	6	1	2	6	7	7	5	6	40
460-479	2	1	3	2	1	4	1	3	17
480-499	1	4	1	5	1	7	2	4	25
500-519	2	2	3	3	4	1	6	3	24
520-539	4	4	1	1	2	3		1	16
540-559		2	1	3	1		2	1	10
560-579						2			2
580-599	1	1				1			3
600-619		1		1					2
620-639			1						1
640-659			1						1
660-679								1	1
680-699									
Total	61	49	38	63	45	70	51	55	432
Mean length	407	420	414	415	406	424	414	431	417

^a Notched.

^b Unnotched.

TABLE 193. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF BIGMOUTH BUFFALO CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 19									
20- 39									
40- 59									
60- 79									
80- 99									
100-119									
120-139									
140-159									
160-179									
180-199									
200-219									
220-239									
240-259									
260-279			1			2			3
280-299						2			2
300-319		1		1		2			4
320-339					1	2	1		4
340-359	3	3		1	1	4	1		13
360-379	4	3	1	1		1	1	1	12
380-399		1		1	1			1	4
400-419		3		2	1			1	7
420-439	2	1	1		1	1	1		7
440-459				1		2		3	6
460-479	1	1		1			1		4
480-499	2	1		1		2			6
500-519			1	1			1	3	6
520-539					1	1			2
540-559			1						1
560-579			1						1
580-599				1					1
600-619		1							1
620-639									
640-659									
660-679									
680-699									
<hr/>									
Total	12	15	6	11	6	19	6	9	84
Mean length	402	404	448	432	406	367	405	448	407

^a Notched.

^b Unnotched.

TABLE 194. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF RIVER CARPSUCKER CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 19									
20- 39									
40- 59									
60- 79									
80- 99						1			1
100-119									
120-139					1				1
140-159									
160-179									
180-199									
200-219									
220-239									
240-259									
260-279									
280-299									
300-319						2			2
320-339				1		2	1		4
340-359	2	2	4	5	6	4	2	1	26
360-379	1	10	16	6	7	9	4	4	57
380-399	1	15	17	10	16	11	4	4	78
400-419	3	20	19	15	8	9	9	10	93
420-439	4	14	11	9	3	9	1	3	54
440-459	2	9	2	5			1	1	20
460-479	2	1	1	1	1	1		1	8
480-499		1							1
500-519									
520-539									
540-559									
560-579									
580-599									
600-619									
620-639									
640-659									
660-679									
680-699									
Total	15	72	70	52	42	48	22	24	345
Mean length	414	408	397	402	382	384	393	404	397

^a Notched.

^b Unnotched.

TABLE 195. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF CHANNEL CATFISH CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 29									
30- 59	2		1					4	7
60- 89	2	7		1			3	6	19
90-119		1	1				1		3
120-149				1					1
150-179	2								2
180-209	2			1		1			4
210-239		1			1				2
240-269			1	1			1		3
270-299	1	1	1				1		4
300-329					2	1	1	5	9
330-359					2		1		3
360-389									
390-419	1						1	1	3
420-449						1		2	3
450-479								1	1
480-509					1			1	2
510-539	1					1		2	4
540-569							2	2	4
570-599							1		1
600-629				1					1
630-659	1					1			2
660-689								2	2
690-719									
720-749									
750-779					1				1
780-809									
810-839									
840-869									
870-899									
900-929									
930-959									
960-989									
990-1019									
Total	12	10	4	5	7	5	12	26	81
Mean length	236	112	173	262	399	426	300	308	278

^a Notched.

^b Unnotched.

TABLE 196. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF BLUE CATFISH CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 29									
30- 59									
60- 89		1							1
90-119									
120-149									
150-179			1						1
180-209	3						1		4
210-239	4			3	1	2	2	4	16
240-269	4	1	2	3	2	2	1	1	16
270-299		1	2			1			4
300-329	1			1					2
330-359	1		2			2			5
360-389									
390-419	1								1
420-449									
450-479		1				1		1	3
480-509									
510-539									
540-569			2						2
570-599									
600-629					2				2
630-659									
660-689									
690-719					1				1
720-749				1					1
750-779									
780-809									
810-839									
840-869									
870-899									
900-929									
930-959									
960-989									
990-1019									
Total	14	4	9	8	6	8	4	6	59
Mean length	255	271	332	307	446	292	224	272	299

^a Notched.

^b Unnotched.

TABLE 197. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF FLATHEAD CATFISH CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 29									
30- 59									
60- 89	1								1
90-119			1						1
120-149									
150-179	1								1
180-209	2	2			1		1	1	7
210-239	1		2			2	1	1	7
240-269	1	3	1	2	2	1	2	1	13
270-299	1		1	1				1	4
300-329					2			1	3
330-359		1		1	1	2	1		6
360-389	1	1		1		1			4
390-419					2	1	1	3	7
420-449		1			2	1		2	6
450-479		1	2			4	1		8
480-509						1	2	1	4
510-539		1						1	2
540-569	1	1	1	1	2				6
570-599						2		1	3
600-629						1			1
630-659				1		1			2
660-689							1		1
690-719									
720-749									
750-779									
780-809									
810-839						1			1
840-869						1			1
870-899							1		1
900-929	1					2	1		4
930-959				1		1			2
960-989						1		1	2
990-1019								1	1
<hr/>									
Total	10	11	8	8	12	23	12	15	99
Mean length	320	346	325	455	375	559	463	460	435

^a Notched.

^b Unnotched.

TABLE 198. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF WHITE BASS CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 19									
20- 39									
40- 59				1			1		2
60- 79		3		1				1	5
80- 99		2		1	1				4
100-119		1	1	2	1	2	1		8
120-139								1	1
140-159			1	1					2
160-179					1				1
180-199		1			1				2
200-219			1	1		1	2		5
220-239	1	1						1	3
240-259		1	1	1		1	1	1	6
260-279				2					2
280-299			1				1		2
300-319		3			2	1		1	7
320-339		1			1	1		1	4
340-359					1				1
360-379							1		1
380-399									
400-419		1							1
420-439									
440-459									
460-479									
480-499									
500-519									
520-539									
540-559									
560-579									
580-599									
600-619									
620-639									
640-659									
660-679									
680-699									
Total	1	14	5	10	8	6	7	6	57
Mean length	231	205	200	156	233	221	213	217	204

^a Notched.

^b Unnotched.

TABLE 199. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF WHITE CRAPPIE CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 19									
20- 39									
40- 59		1		1					2
60- 79	1		1	1					3
80- 99	1				1		1		3
100-119		1							1
120-139									
140-159									
160-179						1	1	1	3
180-199			1	1	1	2	1		6
200-219		1		1		1	2	1	6
220-239	1		1			2	1	5	10
240-259					2	1			3
260-279	1		1			1		2	5
280-299			1				1		2
300-319	1								1
320-339									
340-359									
360-379									
380-399									
400-419									
420-439									
440-459									
460-479									
480-499									
500-519									
520-539									
540-559									
560-579									
580-599									
600-619									
620-639									
640-659									
660-679									
680-699									
Total	5	3	5	4	4	8	7	9	45
Mean length	192	122	214	129	192	216	200	229	197

^a Notched.

^b Unnotched.

TABLE 200. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF BLACK CRAPPIE CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike								Total
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b	
0- 19									
20- 39									
40- 59									
60- 79									
80- 99		1							1
100-119									
120-139									
140-159									
160-179		1	1	1		2			5
180-199						2			2
200-219	1			1	1	1	1	4	9
220-239		1		1	2		2	1	7
240-259		1	1		1		1	3	7
260-279									
280-299									
300-319									
320-339									
340-359									
360-379									
380-399									
400-419									
420-439									
440-459									
460-479									
480-499									
500-519									
520-539									
540-559									
560-579									
580-599									
600-619									
620-639									
640-659									
660-679									
680-699									
Total	1	4	2	3	4	5	4	8	31
Mean length	205	188	211	200	233	188	224	227	212

^a Notched.

^b Unnotched.

TABLE 201. FREQUENCIES AND MEANS OF TOTAL LENGTHS OF FRESHWATER DRUM CAPTURED AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER WITH ALL SAMPLING GEAR.

Length group(mm)	Dike							Total	
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a		114.0L ^b
0- 19									
20- 39				1			1		2
40- 59								1	1
60- 79		1		3		1	1	3	9
80- 99				3	1	5	4	2	15
100-119	1					1	2		4
120-139	2			2			2	1	7
140-159		1		2	4	1		3	11
160-179	3	2	1	1	4	3	3	5	22
180-199	2	1	1	1	5	4	2	2	18
200-219	1	2		4	1	5	3	2	18
220-239		3		5	2	1	2	5	18
240-259	7	1		4	1	5	3	2	23
260-279	2	5		1	1	4	1	4	18
280-299		5		4	6	4	3	4	26
300-319	6	5	1	1	6	8	1	9	37
320-339	6	5		3	11	3	7	3	38
340-359	3		1	3	3	4	2	2	18
360-379					1			2	3
380-399									
400-419									
420-439									
440-459									
460-479									
480-499									
500-519									
520-539									
540-559									
560-579									
580-599									
600-619									
620-639									
640-659									
660-679									
680-699									
Total	33	31	4	38	46	49	37	50	288
Mean length	263	260	247	215	281	238	220	240	245

^a Notched.

^b Unnotched.

TABLE 202. AVERAGE SIZE OF 11 DIFFERENT SPECIES OF FISH TAKEN AT THREE UNNOTCHED AND FIVE NOTCHED DIKES IN THE MIDDLE MISSISSIPPI RIVER (*IDENTIFIES A SIGNIFICANT DIFFERENCE BETWEEN AVERAGE SIZES AT UNNOTCHED AND NOTCHED DIKES; t-test, $P \leq 0.10$).

Species	Average total length (mm)	
	Unnotched dikes ^a	Notched dikes ^b
Gizzard shad	182	142*
Carp	418	416
Bigmouth buffalo	431	396*
River carpsuckers	395	398
Channel catfish	319	241*
Blue catfish	338	279*
Flathead catfish	430	438
White bass	197	210
White crappie	197	197
Black crappie	223	201*
Freshwater drum	247	244

^a Dikes 103.2L, 103.3R, and 114.0L.

^b Dikes 98.9R, 100.1R, 102.2L, 113.5L, and 113.9L.

TABLE 203. TAXONOMIC LIST OF BENTHIC INVERTEBRATES COLLECTED WITH ARTIFICIAL SUBSTRATE SAMPLERS AND A GRAB (DREDGE) SAMPLER AT EACH DIKE IN THE MIDDLE MISSISSIPPI RIVER. X = PRESENT.

Classification	Dike									
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b		
Phylum: Arthropoda										
Class: Insecta										
Order: Ephemeroptera (mayflies)										
Family: Baetidae						X				
<u>Baetis</u> sp.			X				X			
Family: Heptageniidae										
<u>Stenonema pulchellum</u>	X	X	X	X	X	X	X	X		
<u>Stenonema femoratum</u>		X								
<u>Stenacron</u> sp.	X	X	X	X	X	X	X	X		
<u>Heptagenia</u> sp.									X	
Family: Oligoneuriidae										
<u>Isonychia</u> sp.	X									
Family: Ephemeridae										
<u>Hexagenia</u> sp. (<u>limbata</u>)	X	X	X	X	X	X	X	X		
Family: Palingeniidae										
<u>Pentagenia</u> sp.	X	X	X	X	X	X				
Family: Potamanthidae										
<u>Potamanthus</u> sp.	X									
Family: Tricorythodidae										
<u>Tricorythodes</u> sp.	X	X	X	X	X	X	X	X		

TABLE 203. (CONTINUED)

Classification	Dike									
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b		
Family: Caenidae										
<u>Caenis</u> sp.	X	X	X	X	X	X	X	X		X
Order: Trichoptera (caddisflies)										
Family: Hydropsychidae										
<u>Cheumatopsyche</u> sp.	X		X							X
<u>Hydropsyche orris</u>	X	X	X	X	X	X	X	X		X
<u>H. simulans/incommoda</u>	X		X			X				
<u>Hydropsyche</u> sp.						X				
<u>Potamyia flava</u>	X	X	X	X	X	X	X	X		X
Family: Polycentropodidae										
<u>Polycentropus</u> sp.	X	X	X	X	X	X	X	X		X
Family: Leptoceridae				X						
<u>Nectopsyche</u> sp.			X			X				
<u>Ceraclea</u> sp.							X.			
Family: Hydroptilidae										
<u>Neotrichia</u> sp.	X					X				
Order: Odonata (damselflies, dragonflies)										
Family: Coenagrionidae										
<u>Enallagma</u> sp.	X					X				
<u>Argia</u> sp. (<u>moesta</u>)	X	X	X	X	X	X	X	X		X

TABLE 203. (CONTINUED)

Classification	Dike									
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b		
Family: Macromiidae			X			X	X	X		
<u>Macromia</u> sp.										
Family: Libellulidae		X								
Family: Gomphidae	X	X	X	X	X	X	X	X		
Order: Coleoptera (beetles)										
Family: Elmidae										
<u>Stenelmis</u> sp.	X	X	X	X	X	X	X	X		
<u>Dubiraphia</u> sp.			X							
Family: Dytiscidae										X
Family: Hydrophilidae										
<u>Berosus</u> sp.										X
Order: Diptera (flies, midges)										
Family: Chironomidae	X	X	X	X	X	X	X	X		
Family: Simuliidae	X									
Family: Empididae	X		X			X	X			
Family: Ceratopogonidae										
<u>Bezzia</u> , <u>Probezzia</u> , ...,										
Family: Chaoboridae		X	X			X	X	X		
<u>Chaoborus</u> sp.							X			

TABLE 203. (CONTINUED)

Classification	Dike									
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b		
Order: Megaloptera										
Family: Sialidae (alderflies)										
<u>Sialis</u> sp.	X		X			X				
Class: Crustacea										
Order: Isopoda (aquatic sow bugs)										
Family: Asellidae										
<u>Asellus</u> sp.	X	X	X			X	X	X		
Order: Amphipoda (scuds, sideswimmers)										
Family: Gammaridae										
<u>Gammarus</u> sp.	X		X	X	X		X		X	
Family: Talitridae										
<u>Hyaella azteca</u>									X	
Order: Decapoda										
Family: Astacidae (crayfishes)			X							
<u>Orconectes</u> sp.			X							
Family: Palaemonidae (freshwater prawns)										
<u>Palaemonetes (P.) kadlakensis</u>		X							X	
Phylum: Annelida										
Class: Oligochaeta (aquatic earthworms)	X	X	X	X	X	X	X	X	X	
Class: Hirudinea (leeches)	X	X		X	X	X	X	X	X	

TABLE 203. (CONTINUED)

Classification	Dike									
	98.9R ^a	100.1R ^a	102.2L ^a	103.2L ^b	103.3R ^b	113.5L ^a	113.9L ^a	114.0L ^b		
Phylum: Nematomorpha (horsehair worms)										
Order: Gordiida									X	
Phylum: Platyhelminthes										
Family: Planariidae (flatworms)	X	X	X		X	X	X		X	
Phylum: Nemata (roundworms)	X					X				
Phylum: Mollusca										
Class: Gastropoda (snails, limpets)										
Family: Physidae										
Physsa sp.	X	X	X	X	X	X	X		X	
Family: Ancyliidae										
Ferrissia sp.	X									
Family: Pleuroceridae										
Goniobasis sp.	X									
Family: Planorbidae	X									
Class: Pelecypoda										
Family: Sphaeriidae (fingernail clams)	X	X	X	X	X	X	X		X	
Family: Unionidae (freshwater mussels)							X		X	
Leptodea fragilis			X		X	X				
Number of taxa (55)	33	23	34	18	20	32	28	27		

^a Notched.^b Unnotched.

TABLE 204. PERCENTAGE COMPOSITION OF BENTHIC INVERTEBRATE GROUPS COLLECTED IN ARTIFICIAL SUBSTRATE SAMPLERS AT EACH DIKE AND ALL DIKES COMBINED IN THE MIDDLE MISSISSIPPI RIVER.

Invertebrate group (number collected)	Dike												All
	98.9R	100.1R	102.2L	103.2L	103.3R	113.5L	113.9L	114.0L	Unnotched ^a	Notched ^b			
Ephemeroptera (6,350)	22	14	15	7	4	12	14	17	11	15	14		
Trichoptera (3,706)	11	5	19	1	1	7	4	3	2	10	8		
Odonata (1,649)	2	6	3	1	2	6	2	5	3	4	4		
Diptera (5,087)	23	12	14	5	8	8	8	6	7	13	12		
Oligochaeta (25,976)	37	61	47	85	81	65	67	65	74	55	59		
Other (1,448)	5	2	2	1	4	2	5	4	3	3	3		

^a Dikes 103.2L, 103.3R, and 114.0L.

^b Dikes 98.9R, 100.1R, 102.2L, 113.5L, and 113.9L.

TABLE 205. PERCENTAGE COMPOSITION OF BENTHIC INVERTEBRATE GROUPS COLLECTED IN SPRING, SUMMER, AND FALL, 1981, AT DIKES IN THE MIDDLE MISSISSIPPI RIVER.^a INVERTEBRATES WERE ALLOWED TO COLONIZE ARTIFICIAL SUBSTRATE SAMPLERS FOR APPROXIMATELY 6 WEEKS PRIOR TO REMOVAL.

Invertebrate group (number collected)	Spring ^b	Summer ^b	Fall ^b	All year
Ephemeroptera (6,350)	12	28	10	14
Trichoptera (3,706)	10	11	3	8
Odonata (1,649)	1	9	6	4
Diptera (5,087)	9	12	16	12
Oligochaeta (25,976)	66	36	60	59
Other (1,448)	2	4	5	3

^a Dikes 98.9R, 100.1R, 102.2L, 103.2L, 103.3R, 113.5L, 113.9L, and 114.0L.

^b Invertebrates were removed from samplers on 18-19 June (spring), 18-20 August (summer), and 6-9 October (fall).

TABLE 206. TOTAL NUMBER OF TAXA AND INVERTEBRATES COLLECTED WITH ARTIFICIAL SUBSTRATE SAMPLERS AT EIGHT DIKES IN THE MIDDLE MISSISSIPPI RIVER. MARGALEF (\bar{d}) AND SHANNON-WEAVER (\bar{d}) DIVERSITY INDEX VALUES WERE CALCULATED FOR INVERTEBRATE COMMUNITIES AT EACH DIKE AND ALL DIKES COMBINED.

Dikes	Total number		Margalef \bar{d}^c	Shannon-Weaver \bar{d}^c
	taxa	invertebrates		
98.9R	33	6,489	2.74	2.47
100.1R	23	4,967	2.03	1.88
102.2L	34	8,817	2.26	1.95
103.2L	18	1,534	1.58	1.15
103.3R	20	2,698	1.73	1.09
113.5L	32	9,375	1.98	1.89
113.9L	28	6,670	1.93	1.78
114.0L	27	3,666	1.91	1.87
Unnotched ^a	30	7,898	1.74	1.37
Notched ^b	51	36,318	2.19	1.99
All dikes	55	44,216	2.02	1.76

^a Dikes 103.2L, 103.3R, and 114.0L.

^b Dikes 98.9R, 100.1R, 102.2L, 113.5L, and 113.9L.

^c Average value per sampler.

TABLE 207. AVERAGE NUMBERS OF TAXA AND INVERTEBRATES COLLECTED IN ARTIFICIAL SUBSTRATE SAMPLERS AT EACH DIKE AND ALL DIKES COMBINED IN THE MIDDLE MISSISSIPPI RIVER.

Dike	Number of samplers recovered	Average number per sampler	
		taxa	invertebrates
98.9R	4	21	1,622
100.1R	6	14	828
102.2L	6	17	1,470
103.2L	4	10	384
103.3R	3	12	899
113.5L	6	15	1,563
113.9L	5	14	1,334
114.0L	3	14	1,222
Unnotched ^a	10	12	791
Notched ^b	27	16	1,346
All dikes	37	15	1,196

^a Dikes 103.2L, 103.3R, and 114.0L.

^b Dikes 98.9R, 100.1R, 102.2L, 113.5L, and 113.9L.

TABLE 208. NUMBER OF TAXA AND TOTAL NUMBER OF INVERTEBRATES COLLECTED IN THE FALL OF 1981 IN GRAB (DREDGE) SAMPLES AT TWO SITES (STATIONS 4 AND 7, FIG. 226) AT EACH DIKE AND ALL DIKES COMBINED IN THE MIDDLE MISSISSIPPI RIVER.

Dike	Total number	
	taxa	invertebrates
98.9R	3	13
100.1R	2	44
102.2L	3	10
103.2L	5	34
103.3R	3	25
113.5L	3	9
113.9L	1	1
114.0L	2	6
Unnotched ^a	5	65
Notched ^b	5	77
All dikes	6	142

^a Dikes 103.2L, 103.3R, and 114.0L.

^b Dikes 98.9R, 100.1R, 102.2L, 113.5L, and 113.9L.

TABLE 209. SEASONAL CAPTURE RATES OF INVERTEBRATES WITH ARTIFICIAL SUBSTRATE SAMPLERS AT EIGHT DIKES IN THE MIDDLE MISSISSIPPI RIVER.

Sampling period	Number of samplers recovered	Average number per sampler	
		taxa	invertebrates
Spring	13	14	1,802
Summer	10	18	790
Fall	14	13	921
All year	37	15	1,195

TABLE 210. WATER QUALITY CHARACTERISTICS ASSOCIATED WITH EIGHT DIKES IN THE MIDDLE MISSISSIPPI RIVER DURING 1981. EACH VALUE REPRESENTS A MEAN FROM SEVEN STATIONS SINCE THERE WERE NO SIGNIFICANT DIFFERENCES FROM STATION TO STATION.

Dike	Date	Water Temperature ($^{\circ}\text{C}$)	Dissolved oxygen (mg/l)	Turbidity (JTU)
98.9R ^a	29 May	20.6	6.9	77
	29 Jul	26.0	6.1	73
	3 Sep	25.0	6.1	70
	8 Oct	18.0	8.4	53
100.1R ^a	29 May	20.5	6.8	78
	29 Jul	26.0	6.1	77
	3 Sep	25.0	6.0	69
	8 Oct	17.9	8.1	51
102.2L ^a	29 May	20.0	6.9	76
	29 Jul	25.5	6.1	77
	3 Sep	25.0	6.1	81
	8 Oct	18.0	9.2	48
103.2L ^b	29 May	20.0	6.8	74
	29 Jul	25.6	5.8	79
	3 Sep	25.0	6.1	74
	8 Oct	18.0	9.4	46
103.3R ^b	29 May	20.5	6.8	68
	29 Jul	26.0	5.8	82
	3 Sep	25.1	6.2	64
	8 Oct	18.0	9.3	59
113.5L ^a	29 May	19.1	6.6	76
	29 Jul	25.5	5.9	79
	3 Sep	25.1	6.3	67
	8 Oct	17.7	9.7	51
113.9L ^a	29 May	19.0	6.7	75
	29 Jul	25.5	5.7	79
	3 Sep	25.0	6.3	73
	8 Oct	18.0	9.6	55
114.0L ^b	29 May	19.0	6.6	76
	29 Jul	25.5	5.7	79
	3 Sep	25.1	6.4	54
	8 Oct	17.8	9.2	55

^a Notched.

^b Unnotched.

TABLE 211. ANIMALS AND ANIMAL SIGNS RECORDED IN THE VICINITY OF EIGHT
DIKES^a IN THE MIDDLE MISSISSIPPI RIVER.

Mammals:

Opossum
Eastern fox squirrel
Beaver
Muskrat
Raccoon
White-tailed deer

Belted kingfisher
Barn swallow
Purple martin
Crow
Red-winged blackbird
Baltimore oriole
Common grackle
Indigo bunting
American goldfinch

Birds:

Great blue heron
Green heron
Canada goose
Snow goose
Mallard
Gadwall
Green-winged teal
Blue-winged teal
Northern shoveler
Wood duck
Turkey vulture
Bald eagle
American coot
Killdeer
Spotted sandpiper
Mourning dove

Reptiles:

Common snapping turtle
Red-eared slider
Map turtle
Mississippi map turtle
Ouachita map turtle
Midland smooth softshell
Eastern spiny softshell
Eastern garter snake

Amphibians:

Leopard frog

^a Dikes 98.9R, 100.1R, 102.2L, 103.2L, 103.3R, 113.5L, 113.9L, and 114.0L.